Pedestrian Mil Plan Mil



2001



In coordination with Civil Works, Inc.



Alexander Penelas *Mayor*

Governing Board

Gwen Margolis *Chairperson*

Miriam Alonso Jimmy Morales Dennis C. Moss Bruno Barreiro Barbara M. Carey Dorrin D. Rolle Joe J. Celestin Natacha Seijas Betty T. Ferguson Darryl K. Sharpton Perla Tabares Hantman Jose Smith William H. Kerdyk Katy Sorenson Ronald Krongold Rebeca Sosa Joe A. Martinez Javier Souto Raul Martinez Arthur E. Teele, Jr.

Non-Voting Membership

Florida Department of Transportation Jose Abreu Gary Donn

Steve Shiver County Manager

Jose-Luis Mesa *MPO Director*

Lisa Ross-McMillion

Acknowledgements

Giovanni Batista

The Miami-Dade Metropolitan Planning Organization (MPO) would like to thank the following committees for their input and assistance in developing the Miami-Dade County 2025 Pedestrian Plan.

Bicycle/Pedestrian Advisory Committee

David Kaufman ^{Chairman}	Edgardo Guerrero	Larry Shahboz
Brett Bibeau	Brian Hannigan	Ted Silver
Dr. Barry Burak	Bruce Henderson	Brian Singer
Mike Fleming	Lillian Ros Martin	Leo Succar

Long Range Transportation Plan Steering Committee

Ossama Al-Aschkar	Rafael DeArazoza	Michael Moore
Broward County MPO	Florida Department of Transportation	MPO Secretariat
Frank Baron	Alberto Dominguez	Carlos Roa

Alberto Dominguez MPO Secretariat City of Miami MPO Secretariat Anita Fain-Holloway

City of North Miami City of North Miami Miami-Dade Transit

Frank Baumann Wilson Fernandez Jose-Luis Posada Miami-Dade County Department of Planning and Zoning MPO Secretariat Miami-Dade County Seaport

Charles Blowers Carl Filer Rene Rodriguez Miami-Dade County Florida Department of Transportation Florida Department of Transportation Department of Planning and Zoning Helen Brown

Randy Fox Kim Samson Miami-Dade County Florida Department of Transportation Florida Department of Transportation Department of Planning and Zoning

Ping Chang Mario Garcia Jesus Sanchez South Florida Regional Planning Council Miami-Dade Transit Miami-Dade Expressway Authority

Bob Cincotta David Henderson Phil Steinmiller Miami-Dade County Florida Department of Transportation MPO Secretariat Public Works Department

Jeff Cohen Henry Johnson Clark Turner Miami-Dade County Public Works Department City of Miami Beach City of Miami

Enrique Cuellar Mark Woerner Joseph Johnson Miami-Dade County Miami-Dade County City of Miami Beach Department of Environmental Resource Management Department of Planning and Zoning

David Korros Florida Department of Transportation

Table of Contents

Executive Summary	i
Definitions	V
Introduction	1
Purpose	
Background	
Previous Efforts	
MPO/Committee Role	
Existing Conditions	2
2000 Pedestrian Roadway Network	2
2001 Pedestrian Level of Service (PLOS)	
Current Conditions/PLOS Ratings	
Latent Demand Score (LDS)	
Latent Demand Methodology	
LDS Ratings	
Project Evaluation Methodology	9
Evaluation Criteria	<i>9</i>
Weighting of Evaluation Criteria	
Composite Evaluation Scores	
Development of Candidate Projects	
Identification of Candidate Pedestrian Projects	14
Development of Minimum Revenue Plan	
Funding Levels	15
Minimum Revenue Plan	
Implementation	25
Recognition of Adopted Plans	25
Successful Implementation of Adopted Plans	

List of Tables

Table 1.	Pedestrian Level of Service	4
Table 2.	Pedestrian Level of Service Segment Summary	4
Table 3.	Pedestrian Latent Demand Score Segment Summary	7
Table 4.	Pedestrian Evaluation Criteria	. 10
Table 5.	Weighting Percentages for Pedestrian Project Evaluation Criteria	. 12
Table 6.	Composite Pedestrian Evaluation Score Summary	. 12
Table 7.	Evaluation Scores Sub-Ranking	. 14
Table 8.	Pedestrian Candidate Projects, Subranked Evaluation Score Summary.	. 15
Table 9.	Minimum Revenue Plan	. 17
	List of Figures	
Figure 1	. 2000 Pedestrian Network	3
Figure 2	. 2001 Pedestrian Level of Service	5
Figure 3	. 2001 Pedestrian Latent Demand Scores	8
Figure 4	. 2001 Pedestrian Evaluation Scores	. 13
Figure 5	. 2001 Pedestrian Minimum Revenue Plan	. 24

List of Appendices

Appendix A Unfunded Projects
Appendix B Technical Appendix

Executive Summary

Introduction

Increasing numbers of Miami-Dade County residents and visitors are choosing to walk or bike for all or a portion of their trip. To meet the needs of these travelers, the Miami-Dade Metropolitan Planning Organization (MDMPO) has addressed walking and bicycling in its transportation plan. The creation of a Pedestrian Plan is a step towards not only enhancing the County's pedestrian facilities but also achieving a higher percentage of non-motorized trips by identifying areas in greatest need of pedestrian improvements and focusing improvements to those areas.

The purpose of the 2025 Pedestrian Plan is to:

- Identify pedestrian facility needs based on quantitative analysis;
- Identify Candidate Projects to address pedestrian facility needs;
- Prioritize pedestrian projects; and
- Develop a Minimum Revenue Plan based on projected funding.

The goal of the 2025 Miami-Dade County Pedestrian Facilities Plan is to facilitate the construction of pedestrian improvements at locations that have been determined to address the County's most pressing needs.

Existing Conditions

Since no previous facilities plan has been prepared for the County, the 2025 Bicycle Plan and the 2025 Long Range Transportation Plan (plus certain additional roads included in the 1997 Bicycle Plan) serve as the basis for the 2000 Pedestrian Road Network The 2000 Pedestrian Network consists of over 1,500 centerline miles of roadway that are divided into nearly 3,500 segments for analysis.

2000 Pedestrian Level of Service (PLOS)

The determination of the pedestrian level of service for each segment of the Miami-Dade Network is based on the operational level of service methodology adopted by the Florida Department of Transportation (FDOT). The Pedestrian Level of Service (PLOS) Model identifies the pedestrian level of service for a segment of the Pedestrian Network on a scale of A to F based on a numerical model evaluating a facility's given conditions. A PLOS of "A" indicates good pedestrian conditions and "F" indicates the least favorable conditions. PLOS is a measure of the quality of the pedestrian environment based on measured physical attributes.

Of the over 1,500 miles analyzed, 57.2 percent of roadway miles received a PLOS score of "C" or better. Approximately 43 percent of the roadway miles received a PLOS score of "D" or worse, with approximately 12 percent receiving a PLOS score of "E" or "F".

Latent Demand Score (LDS)

While sophisticated models have been developed to predict auto and transit travel, until recently there were no models for predicting non-motorized trips such as walking and bicycling. Over the last several years many new methods have been created for

estimating walking and cycling trips, however most of the models are relatively new and unproven. One of the methods, the latent demand score (LDS), has been applied in several metropolitan areas across the U.S. and is gaining acceptance. The latent demand score provides an indication of the potential for pedestrian trips along a roadway segment, regardless of the status or condition of the existing pedestrian facilities along the roadway segment. The LDS provides an indication of the potential demand for pedestrian facilities along a particular roadway corridor assuming adequate, safe pedestrian facilities were available. Latent pedestrian trip activity is directly related to the frequency, magnitude and proximity of trip generators and attractors to a given roadway segment.

All of the segments in the 2000 Pedestrian Roadway Network were rated using the latent demand methodology described above. The LDS for the nearly 3,500 segments evaluated were divided into 5 equal groups, ranging from Low to High. A higher latent demand score indicates a higher potential demand for pedestrian trips. Latent demand is highest for segments that serve or are located adjacent to multiple pedestrian trip generators.

Project Evaluation Methodology

The PLOS analysis identified that Miami-Dade's pedestrian network is fairly complete, with nearly 60% of the roadway network miles analyzed receiving an LOS score of "C" or better. To further evaluate segments within the 2000 Pedestrian Network to identify those segments in most need of pedestrian improvements, five additional project evaluation criteria were developed to produce the Candidate Projects List. The five additional evaluation criteria used were:

- Congestion Reduction
- Connectivity/Network Enhancement
- Support of LRTP Goals and Objectives
- Safety
- School Access

The Miami-Dade MPO Bicycle/Pedestrian Advisory Committee (BPAC) ranked all seven evaluation criteria in order of relative importance to the need for pedestrian improvements. The BPAC identified safety as the most important factor in the evaluation of pedestrian facilities followed by school access, PLOS, connectivity, and congestion reduction. The 2025 Long Range Transportation Steering Committee assigned each criterion a specific numerical weight based on the magnitude of importance assigned by the BPAC. Weights assigned to each criterion by individual steering committee members were averaged to produce the weight assigned to each evaluation criteria in the analysis.

A Composite Evaluation Score for each segment was calculated based on the seven evaluation criteria. Scores were calculated by multiplying the segment's score by the weight for each criterion and summing the resulting weighted scores. The composite

score reflects a segment's relative need (priority) for pedestrian improvements. Scores ranged from a low of 0.47 to a high of 4.02 for pedestrian improvements.

The overall Evaluation Scores for pedestrian facilities on the network are high, reflective of the overall acceptable PLOS for the segments. Relatively good level of service combined with the short trip lengths attributable to the pedestrian mode makes it reasonable to improve even very short segments because the resulting improvement will connect to segments with a better level of service enhancing pedestrian mobility.

Segments with an evaluation score of 4 to 5 are defined as the highest priority segments. Roadway segments with high priority scores indicate a facility with a combination of low PLOS and safety scores and high latent demand, school access, connectivity, congestion and LRTP Support scores. Only one segment within the network falls within the highest priority range (evaluation score of 4.00 to 5.00) and approximately 2 percent of the segments fall within the second highest priority range (evaluation score of 3.00 to 3.99). Many segments have Evaluation Scores that are within hundredths of a percent of the next highest priority range. To further stratify segments with very close Composite Evaluation Scores, segments with a score between 2.50 and 2.99 and between 3.00 and 3.99 were further ranked based on the segment's PLOS and PLDS.

Funding Strategies

Funding sources identified as contributing to funding for projects included in the 2025 Pedestrian Plan are Surface Transportation Program (STP) funds, Transportation Enhancement funds, and Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds. Previous Long Range Transportation Updates have established a funding level of 1.5 percent of STP and CMAQ funds for bicycle and pedestrian improvements. Maintaining a funding level of 1.5 percent and recognizing the MPO's historical allocation of Transportation Enhancement funds for bicycle/pedestrian facilities of 80 percent, a total 2006-2025 funding level of \$62.15 million is projected for bicycle and pedestrian facilities. These funds are sub-allocated as a percent of the total bicycle/pedestrian funds for this period by the following facility types:

- Pedestrian On-road Projects
- Bicycle On-road Projects
- Off-road Projects (Greenways).

Approximately \$4.35 million or 7 percent of the funds available for bicycle and pedestrian improvements are allocated to pedestrian facilities.

Minimum Revenue Plan

Candidate Projects were ranked based on their final evaluation scores. The projected pedestrian funding of \$4.35 million was applied to produce the 2025 Minimum Revenue Plan. The Minimum Revenue Plan was divided into four priority categories each representing a 5-year period of the Long Range Transportation Plan. Funding was applied to Candidate Projects based on their composite evaluation score until anticipated funding was depleted. The Minimum Revenue Plan is provided in **Table 9.** *Minimum*

Revenue Plan and depicted in **Figure 5**. Approximately 92 miles, 50 percent of all Candidate Projects are included in the Minimum Revenue Plan. Unfunded projects identified in the Candidate Projects List are provided in **Appendix A**.

Definitions

Bicycle/Pedestrian Advisory Committee (BPAC) - Committee comprised of private citizens appointed by the MPO Governing Board to provide recommendations on bicycle and pedestrian related issues. The BPAC is charged with identifying opportunities for the use of bicycling, walking and running as safe methods of transportation and recreation in Miami-Dade County. BPAC members are appointed by the MPO Governing Board.

Candidate Projects – Pedestrian improvement projects to be considered for implementation within the plan horizon without consideration of cost.

Latent Demand – Quantitative method to identify the potential demand for pedestrian use along a given roadway segment. Analysis is based on the identification of potential pedestrian trips associated with pedestrian trip generators and attractors without regard to pedestrian level of service.

Long Range Transportation Plan Steering Committee - Committee responsible for coordinating, compiling and preparing the Long Range Transportation Plan, as well as updates to the plan. A staff member from the MPO is assigned as project manager and develops these documents in conjunction with representatives from Federal, State and Local agencies, as well as the municipalities. The committee is composed of representatives of the entities that have Transportation Planning Council (TPC) voting members and are appointed by the Director of each department represented at the TPC. Representatives from the South Florida Regional Planning Council (SFRPC), the Broward MPO and the Citizen's Transportation Advisory Committee (CTAC) are invited to participate as non-voting members.

Miami-Dade Metropolitan Planning Organization (MPO) – Board responsible for the planning of Miami-Dade County's transportation system. The MPO Governing Board is comprised of the Miami-Dade Board of County Commissioners; a representative from the Dade League of Cities; the Miami-Dade Expressway Authority (MDX); the Miami-Dade School Board; an elected official representing municipalities with a population of over 50,000; and one at-large member. In addition, the Florida Department of Transportation (FDOT) has two non-voting members on the MPO Governing Board. MPOs are required by both federal and state laws.

Minimum Revenue Plan – Projects identified for implementation within the plan horizon. Projects are those identified in the Candidate Project list which have been prioritized and matched with eligible funding.

Non-Linked Pedestrian Trips – Trips that can be made entirely by walking and do not include another mode of travel to reach the destination.

Pedestrian Level of Service (PLOS) – Quantitative method of evaluation measuring the pedestrian's perception of safety or comfort along a given roadway segment to determine how well roadways accommodate pedestrian travel. Factors include sidewalk width, buffer between sidewalk and motor vehicle travel lanes, presence of trees or other barriers within the buffer, width of outside travel lane, traffic volume and speed.

Transportation Improvement Plan (TIP) – Plan required by Federal regulation identifying a minimum three-year priority list of federally funded transportation projects. In Miami-Dade County the TIP includes a 5-year priority list of federally funded projects and all other transportation projects funded with state and/or local funds. The TIP must be consistent with the Metropolitan Transportation Plan and meet Clean Air Standards. In order for transportation projects to receive federal funds they must be included in the TIP. This document has to be prepared in cooperation with State and public transit operators and is approved by the MPO and the Governor.

Introduction

Purpose

As a community's population density increases, the number of short trips (those of less than ½ mile) increases. Short trips can often times be made as easily by walking or bicycling as by driving. As the population become more dense, the construction of bicycle and pedestrian facilities as an alternative to automobile travel becomes more important to maintain mobility within the community. The population of Miami-Dade County is expected to exceed 3 million by the year 2025. To meet the transportation needs of the increasing numbers of individuals who walk or bike for all or a portion of their trip, the Miami-Dade Metropolitan Planning Organization (MPO) is planning for these types of facilities in its transportation plan.

It is a stated intention of federal transportation policy to increase non-motorized trips to at least 15 percent of all trips and to reduce the number of non-motorized users killed in traffic crashes by at least 10 percent. In Florida, concurrency requirements were revised in 1999 to encourage a more comprehensive multi-modal evaluation of transportation facilities. Local governments are directed to use professionally accepted techniques for measuring level of service for all modes: automobile, bicycle, pedestrian, transit and trucks. The creation of a Pedestrian Plan is a step towards achieving a higher percentage of non-motorized trips by identifying areas in greatest need of pedestrian improvements and focusing improvements where they are most needed.

The purpose of the 2025 Pedestrian Plan is to:

- Identify pedestrian facility needs based on quantitative analysis;
- Identify Candidate Projects to address pedestrian facility needs;
- Prioritize pedestrian projects; and
- Develop a Minimum Revenue Plan based on projected funding.

The goal of the 2025 Miami-Dade County Pedestrian Facilities Plan is to facilitate the construction of pedestrian improvements at locations that have been determined to address the County's most pressing needs.

Background

Previous Efforts

While Miami-Dade MPO prepared a Bicycle Facilities Plan in 1997, a county-wide pedestrian plan has not been previously developed. The goal of the 2025 Pedestrian Facilities Plan is to identify where improved pedestrian facilities are most needed to facilitate pedestrian travel.

MPO/Committee Role

The Miami-Dade MPO utilized its 2025 LRTP Steering Committee and Bicycle/Pedestrian Advisory Committee (BPAC) to establish the pedestrian facilities project evaluation criteria, weight the project evaluation criteria, review the needs assessment, develop the list of Candidate Projects and recommend a Minimum Revenue Plan. The recommendations of the BPAC were forwarded to the LRTP Steering

Committee for final review. The recommendations of the LRTP Steering Committee serve as the basis for the 2025 Pedestrian Facilities Plan. The Minimum Revenue Plan recommended by the 2025 LRTP Steering Committee and BPAC was adopted by the Miami-Dade County Metropolitan Planning Organization for inclusion in its 2025 Long Range Transportation Plan on December 6, 2001.

Existing Conditions

The existing conditions analysis for pedestrian facilities included the development of the 2000 Pedestrian Road Network and assessment of the level of service and latent demand for all facilities on the network.

2000 Pedestrian Roadway Network

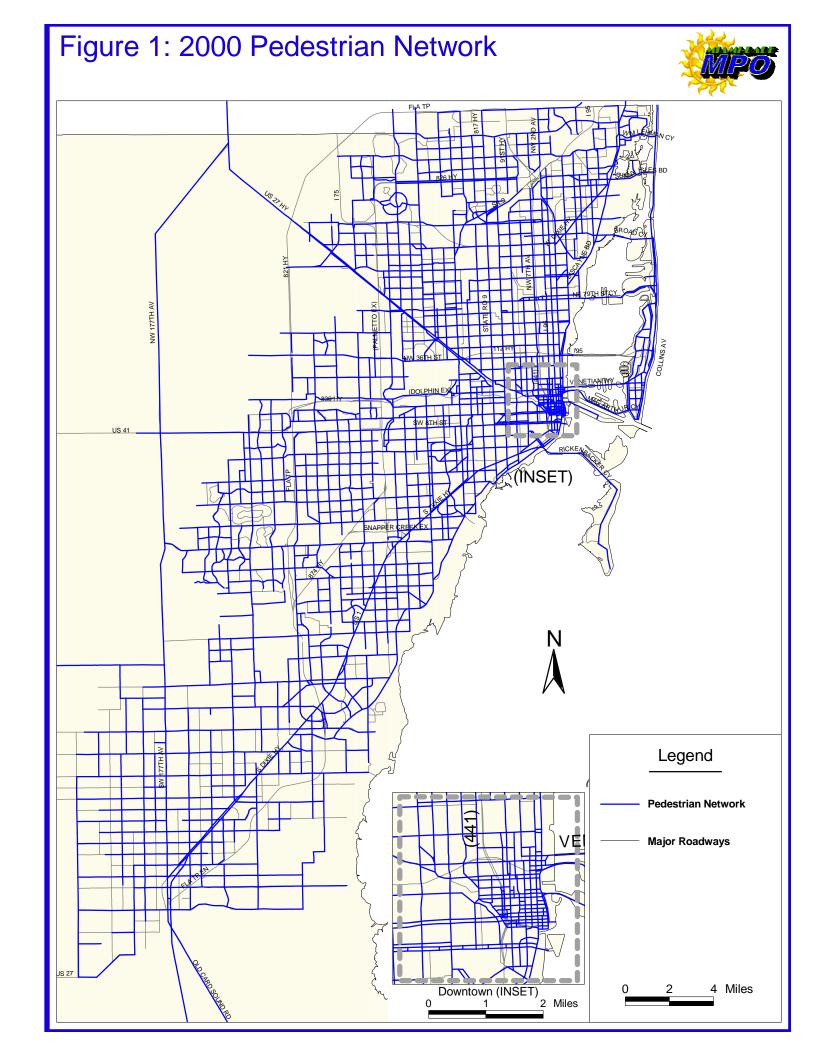
Since no previous pedestrian facilities plan has been prepared for the County, the 2025 Bicycle Plan and the 2025 Long Range Transportation Plan (plus certain additional roads included in the 1997 Bicycle Plan) serve as the basis for the 2000 Pedestrian Road Network. Freeways and toll roads are not included in the inventory. The 2000 Pedestrian Network consists of over 1,500 miles of roadway divided into nearly 3,500 segments for analysis. The 2000 Pedestrian Network is depicted in **Figure 1**.

2001 Pedestrian Level of Service (PLOS)

The determination of the pedestrian level of service for each segment of the 2000 Pedestrian Network is based on the operational level of service methodology adopted by the Florida Department of Transportation (FDOT). The Pedestrian Level of Service (PLOS) Model identifies the pedestrian level of service for a segment of the Pedestrian Network on a scale of A to F based on a numerical model score as shown in Table 1. Pedestrian Level of Service. An LOS of "A" indicates good pedestrian conditions and "F" indicates the least favorable conditions. PLOS is a measure of the quality of the pedestrian environment based on measured physical attributes including the vehicle volume and speed on the adjacent roadway, the presence or absence of a sidewalk, and separation of pedestrians from vehicular traffic.



The LOS determinations made using the PLOS model are not equivalent to the corresponding "letter grade" level of service for vehicles that has been long recognized by planners and the traveling public in Florida. Calibrated on the basis of the educational system grading structure, a LOS of D for the pedestrian mode is a failing score. PLOS is a measure of compatibility for pedestrian travel on a given roadway network and not a measure of capacity. PLOS differs from the standard definition of level of service applied to the automobile mode in that level of service is not a function of congestion on the network facility but rather the quality of service experienced by the pedestrian along a given segment.



 Level of Service
 Model Score

 A
 ≤ 1.5

 B
 >1.5 and ≤ 2.5

 C
 >2.5 and ≤ 3.5

 D
 >3.5 and ≤ 4.5

 E
 >4.5 and ≤ 5.5

 F
 >5.5

Table 1. Pedestrian Level of Service

The PLOS model recognizes two key factors that affect pedestrian LOS:

- 1) Presence of a facility (sidewalk) and
- 2) Separation of pedestrians from the vehicular traffic.

In the determination of PLOS, separation is defined as both the lateral distance and physical barriers such as parked cars and trees. For example, the presence of occupied on-street parking (barrier) increases the level of service over on-street parking that is not occupied (distance only).

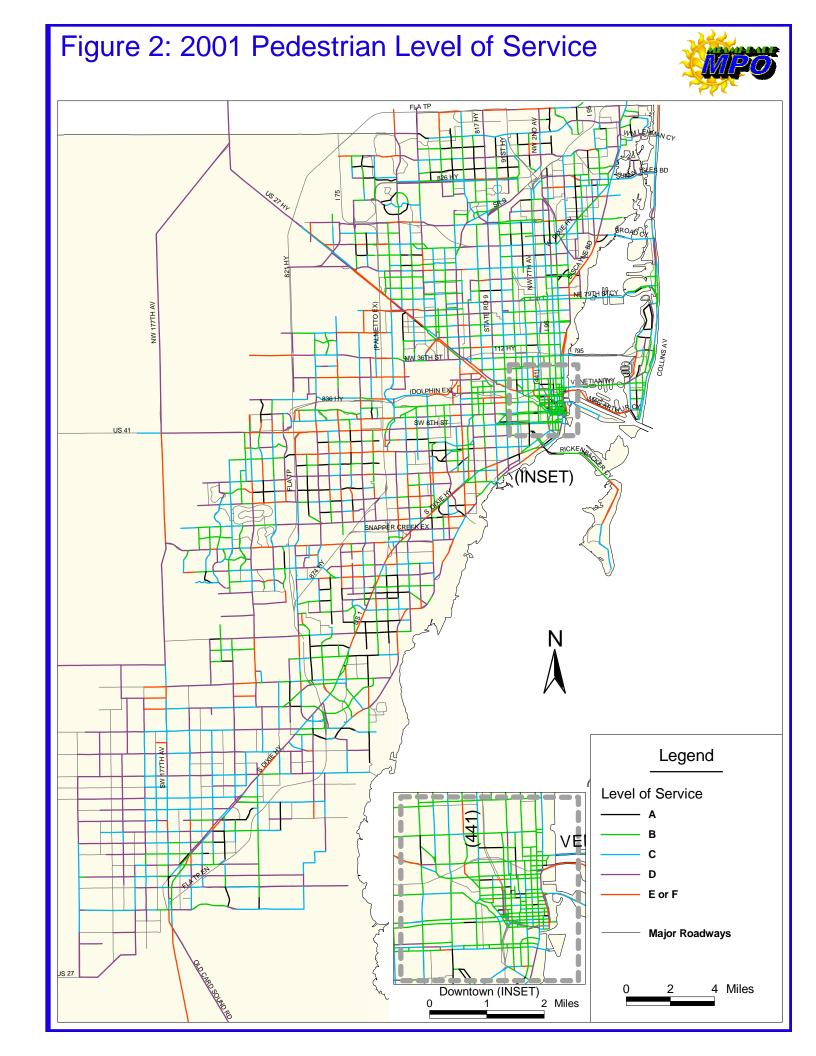
Current Conditions/PLOS Ratings

Each segment in the 2000 Pedestrian Road Network was analyzed using the PLOS methodology. A field inventory of each segment was performed in April 2001. The results of the PLOS current conditions analysis are presented on **Figure 2**.

Of the over 1,500 miles analyzed, 57.2 percent of roadway miles received an acceptable PLOS score of "C" or better. Approximately 43 percent of the roadway miles received an unacceptable PLOS score of "D" or worse, with approximately 12 percent receiving a LOS score of "E" or "F". **Table 2.** *Pedestrian Level of Service Segment Summary* indicates the breakdown of the level of service for the 2000 Pedestrian Roadway Network by segments and miles.

	Segment		Length	
LOS	Number	Percentage	Miles	Percentage
A	250	7.2%	112.82	7.4%
В	1,166	33.7%	366.45	24.0%
С	844	24.4%	394.72	25.8%
D	873	25.3%	474.46	31.1%
Е	167	4.8%	103.15	6.8%
F	156	4.5%	76.14	5.0%

Table 2. Pedestrian Level of Service Segment Summary



Latent Demand Score (LDS)

There are volumes of data available regarding vehicular traffic: number of vehicles that travel on a given roadway, turning movements at intersections, accidents and the amount of traffic generated by a given land use in different areas (urban vs. rural). Information on pedestrian traffic is not as readily available. There is limited information regarding current pedestrian usage in a given area and even less information regarding how many pedestrian trips are generated by a given land use.

While sophisticated models have been developed to predict auto and transit travel, until recently there were no models for predicting non-motorized trips such as walking and bicycling. Over the last several years many new methods have been created for estimating walking and cycling trips, however, most of the models are relatively new and unproven. In 1999, FHWA completed a study on these methods, entitled "Guidebook on Methods to Estimate Non-Motorized Travel". Although this study documented the different methods, it did not recommend or develop a standardized method.

One of the methods described in the FHWA Guidebook is called the latent demand score (LDS). LDS has been applied in several metropolitan areas across the U.S. and is gaining acceptance. The latent demand score provides an indication of the potential for pedestrian trips along a roadway segment, regardless of the status or condition of the existing pedestrian facilities along the roadway segment. The LDS provides an indication of the potential demand for pedestrian facilities along a particular roadway corridor assuming adequate and safe pedestrian facilities were available.

Latent Demand Methodology

The LDS methodology selected for use in developing the 2025 Pedestrian Plan quantifies the potential demand for pedestrian travel on public facilities using a methodology similar to the approach used for predicting vehicle trips (gravity model). The following steps are involved in conducting a latent demand analysis:

- 1) Identify the trip attractors (e.g., homes, etc.) and generators (e.g., employment, parks, schools, etc.) along a corridor segment.
- 2) Geocode the attractors and generators along the corridor and determine the number of attractors/generators within probable travel distances.
- 3) Determine the trip generation of the attractors/generators based on standard trip generation rates and adjust the trip generation for pedestrian travel based on local Census data.
- 4) Compute the trip making probability summations, which includes multiplying the trip generation figures by trip distance impedance factors.

Potential pedestrian trips in Miami-Dade County were calculated based on four trip types:

- Work Trips, including universities;
- Shopping Trips;
- School Trips; and
- Recreation/Social Trips, including Parks and Trail Heads.



Unlike travel demand, there are many factors that affect pedestrian travel demand including land use density, trip distance and availability of pedestrian facilities. Latent pedestrian trip activity is directly related to the frequency, magnitude and proximity of trip generators and attractors to a roadway segment.

The Latent Demand Score for non-linked trips on a roadway segment is the sum of the individual trip purposes (work, shopping, etc.) multiplied by their associated trip share as defined in the National Personal Transportation Survey.

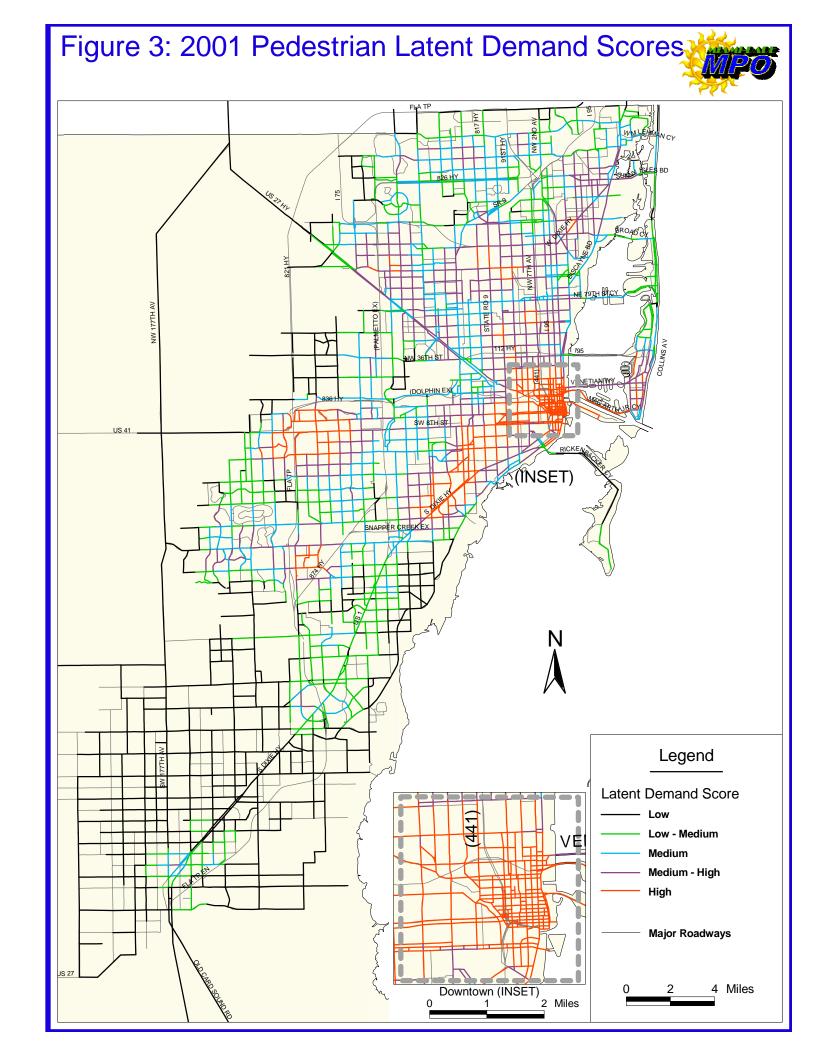
LDS Ratings

All of the segments in the 2000 Pedestrian Roadway Network were rated using the latent demand methodology described above. The LDS for the nearly 3,500 segments evaluated were divided into 5 equal groups, ranging from Low to High. The inclusion of all segments with the same score within a single group produced groups of unequal size. The results of the analysis are depicted on **Figure 3** and in **Table 3**. *Pedestrian Latent Demand Score Segment Summary*. A higher latent demand score indicates a higher potential demand for pedestrian trips.

Latent demand is highest for segments that serve or are located adjacent to multiple pedestrian trip generators. The highest pedestrian trip generators are schools, particularly elementary schools followed by parks and trips associated with family business. In addition to a segment's proximity to high trip generators such as schools and parks, segments that received high latent demand scores are located in areas of high population and employment densities. Less urban areas produce lower latent demand scores due to lower population and employment densities and fewer schools per square mile.

Table 3. Pedestrian Latent Demand Score Segment Summary

	Segments		Length	
LDS	Number	Percentage	Miles	Percentage
Low	693	20.0%	471.15	30.7%
Low-Medium	695	20.1%	290.32	18.9%
Medium	689	19.9%	317.40	20.7%
Medium-High	694	20.0%	268.28	17.5%
High	693	20.0%	185.32	12.1%

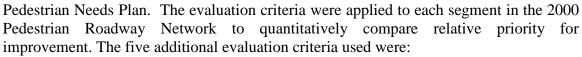


Project Evaluation Methodology

According to the PLOS analysis, nearly 60% of the analyzed Roadway Network operates at an LOS score of "C" or better, indicating Miami-Dade's pedestrian network is fairly complete. To better identify which segments within the 2000 Pedestrian Network are in most need of pedestrian improvements, five additional project evaluation criteria were developed to produce the Candidate Projects List.

Evaluation Criteria

The five additional evaluation criteria were established for use in developing the 2025







- Connectivity/Network Enhancement
- Support of LRTP Goals and Objectives
- Safety
- School Access

A description and scoring method for each evaluation criteria is summarized in **Table 4**. *Pedestrian Evaluation Criteria*.

Weighting of Evaluation Criteria

The BPAC ranked the evaluation criteria in order of relative importance to the need for pedestrian improvements. The BPAC identified safety as the most important factor in the evaluation of pedestrian facilities followed by school access, PLOS, connectivity, and congestion management. The 2025 Long Range Transportation Steering Committee assigned each criterion a specific weight based on the ranked assigned by the BPAC. Weights assigned to each criterion by individual steering committee members were averaged to produce the weights the evaluation criteria. The results are summarized in **Table 5.** Weight Assigned to Pedestrian Project Evaluation Criteria.

Table 4. Pedestrian Evaluation Criteria

	Table 4. I cuesti all Evaluation Clincia		
CRITERIA	DESCRIPTION	SCORING METHOD	
Pedestrian Level of Service (PLOS)	Decision-making tool for the prioritization of pedestrian-related projects. Key factors and inputs affecting this safety-related variable include the presence of a facility (sidewalk) and the separation of pedestrians from the vehicular traffic.	PLOS score of F (very bad) PLOS score of E (very poor) PLOS score of D (poor) PLOS score of C (fair) PLOS score of B (good) or A (very good)	= 5 points = 4 points = 3 points = 2 points = 1 point
Latent Demand Score	Indicator of potential pedestrian demand by segment based on generators of pedestrian trips.	LDS Score of High LDS Score of Medium-High LDS Score of Medium LDS Score of Low-Medium LDS Score of Low	= 5 points = 4 points = 3 points = 2 points = 1 point
Congestion Reduction	Recognizes the vehicular congestion of the adjacent roadway and associates the construction of a pedestrian facility with reduction in vehicular congestion (an alternative mode). Congestion scores are based on 1999 volume to capacity (V/C) ratios of the highway network from the 2025 Long Range Transportation Model. Roadway segments with a high level of congestion are assigned a high score under this criterion.	V/C is > 1 V/C between 0.75 and 1 V/C is < 0.75	= 5 points = 3 points = 1 point
Connectivity/ Network Enhancement	 Measures a roadway segment's proximity to pedestrian generators. Segments are assigned a point for each of the following generators/attractors: transit routes that serve the segment; trailheads that lie within a ¼ mile of the segment; schools that lie within 1/4 mile of the segment (including technical, charter and private schools); and intermodal facilities that lie within 1/4 mile of the segment (TriRail, MetroRail and MetroMover stops). 	Score between 6 and 21 Score between 4 and 5 Score of 3 Score of 2 Score of 1	= 5 points = 4 points = 3 points = 2 points = 1 point

Table 4. Pedestrian Evaluation Criteria

	Table 4: I cuesti ian Evandanon Cilicilia		
CRITERIA	DESCRIPTION	SCORING METHOD	
		Segment appears in the TIP Segment appears in the second	= 5 points
Supports Adopted Long Range	Recognizes the leveraging effect available to projects that are identified for capacity improvement in the 1999-2005 TIP and	five year period of the LRTP Segment appears in the third	= 4 points
Transportation	2020 LRTP Plan. Segments identified for improvement in the	five year period of the LRTP	= 3 points
Flan	pedestrian improvements.	Segment appears in the tast five year period of the LRTP	= 2 points
		Segment does not appear in	
		the LRTP	= 0 points
	Accidents involving nedestriens are a direct indication of unsafe	5 to 8 pedestrian accidents	= 5 points
	recidentia mivorving pedestrians are a direct marcaton of ansaic	4 pedestrian accidents	= 4 points
Safety	peresting podestrien accidents war available from the MDO for	3 pedestrian accidents	= 3 points
	1006 to 1000	2 pedestrian accidents	= 2 points
	1230 to 1332.	1 pedestrian accident	= 1 point
	Mesenmes the movimity of a roadway cament to militio and	Safety score between 129 to 690	= 5 points
	measures are proximity or a road way segment to public and	Safety score between 88 to 128	= 4 points
School Access	private ciclibritaty, illudite, scillor lingir and citation technole. Sagments are assistand points based on its LOS and the	Safety score between 62 to 87	= 3 points
	number of schools that are within a one or two mile buffer	Safety score between 38 to 61	= 2 points
	number of schools that are within a one of two mine duffer.	Safety score between 1 to 37	= 1 point

Table 5. Weight Assigned to Pedestrian Project Evaluation Criteria

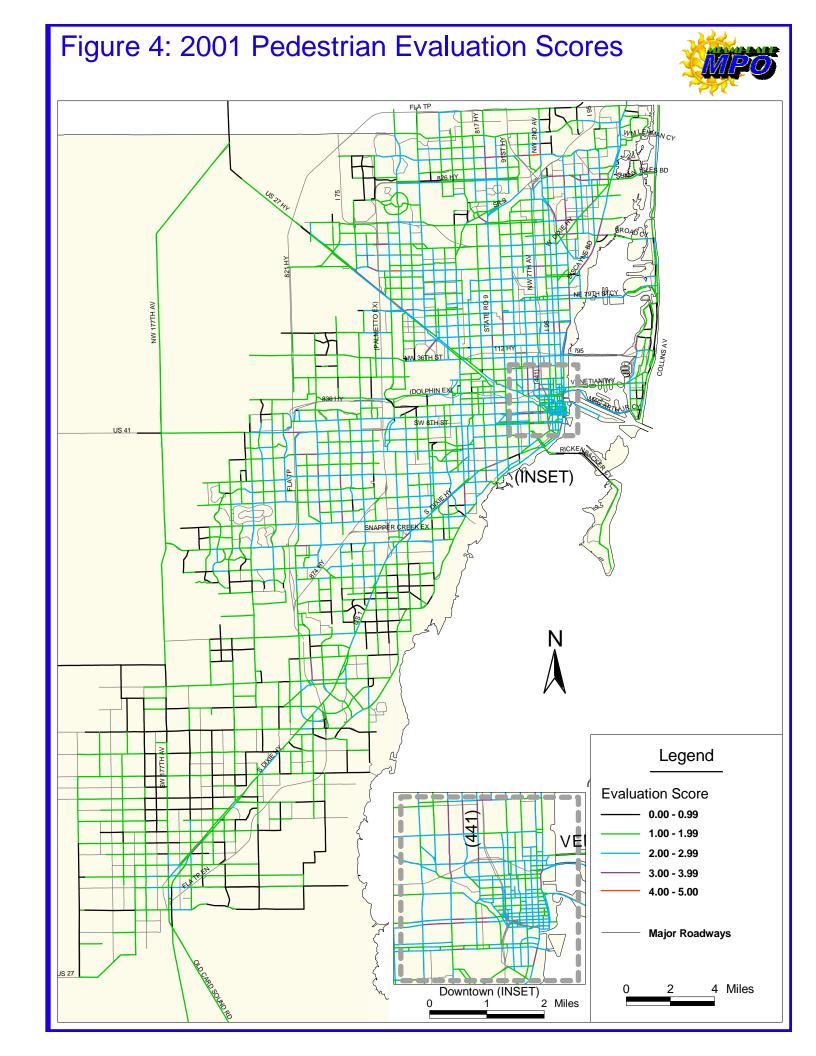
Criteria	Weight
Safety	28.30%
School Access	18.80%
PLOS	17.90%
Connectivity	16.70%
LRTP Support	8.30%
LDS	8.10%
Congestion	1.90%

Composite Evaluation Scores

The Composite Evaluation Score for each segment was calculated by multiplying the segment's score for each of the seven criterion by the weight assigned to that criterion and summing the resulting scores. The Composite Evaluation Score reflects a segment's relative need (priority) for pedestrian improvements. Scores ranged from a low of 0.47 to a high of 4.02 for pedestrian facilities. The number and percentage of segments and centerline miles within each Composite Evaluation Score (1 to 5) is identified in **Table 6.** *Composite Pedestrian Evaluation Score Summary* and depicted on **Figure 4.**

Table 6. Composite Pedestrian Evaluation Score Summary

	Segments		Length	
Score	Number	Percentage	Miles	Percentage
0.0000 - 0.9999	406	11.8%	224.60	14.7%
1.0000 – 1.9999	1,721	50.1%	811.85	53.1%
2.0000 – 2.9999	1,235	35.9%	456.51	29.9%
3.0000 – 3.9999	75	2.2%	34.18	2.2%
4.0000 - 5.0000	1	0.0%	0.51	0.0%



Development of Candidate Projects

Each segment in the 2000 Pedestrian Roadway Network was ranked based on its composite evaluation score. The higher the composite score for a segment the higher the priority for improvement compared to other segments in the analysis. All segments in the 2000 Pedestrian Road Network are included in the Candidate Projects List.



Identification of Candidate Pedestrian Projects

The overall Composite Evaluation Scores for pedestrian facilities on the network are high, reflective of an overall acceptable PLOS for the Pedestrian Network. Less than 12 percent, or 180 centerline miles in the pedestrian network have a PLOS of E or F. Thirty-one percent have a PLOS of D and over 57 percent have a PLOS of A, B or C. This relatively good level of service combined with the short trip lengths attributable to the pedestrian mode makes it reasonable to improve even very short road segments with pedestrian facilities because the resulting improvement will connect to segments with a better PLOS. Improvements to very short segments will still enhance the mobility of pedestrians.

Segments with an evaluation score of 4 to 5 are defined as the highest priority segments. High priority scores indicate a combination low LOS and safety scores and high latent demand, school access, connectivity, congestion and LRTP Support scores. Only one segment within the network falls within the highest priority range (evaluation score of 4.00 to 5.00) and approximately 2 percent of the segments fall within the second highest priority range (evaluation score of 3.00 to 3.99). Many segments have Composite Evaluation Scores that are within hundredths of a percent of the next priority range. To further stratify segments with very close Evaluation Scores, segments with a Composite Evaluation Score between 2.50 and 2.99 and between 3.00 and 3.99 were further prioritized based on the segment's PLOS and PLDS scores as shown in **Table 7**.

A summary of the prioritized evaluation scores, 2.50 to 3.99 is provided in **Table 8.** *Pedestrian Candidate Projects, Subranked Evaluation Score Summary*.

Table 7. Evaluation Scores Sub-Ranking

Priority	Criteria	
High Priority	LOS and LDS sum of 9 or greater	
Medium Priority	LOS and LDS equal to 8	
Low Priority	Remainder of segments	

88.33

5.81%

Table 8. Pedestrial	Table 8. Pedestrian Candidate Projects, Subranked Evaluation Score Summary					
	Segments		Length			
Ranking	Number	Percentage ¹	Miles	Percentage ¹		
3.00 – 3.99						
High	30	0.87%	13.58	0.89%		
Medium	9	0.26%	4.24	0.28%		
Low	39	1.13%	17.11	1.12%		
2.00 - 2.99						
High	89	2.59%	34.99	2.360%		
Medium	51	1.48%	26.03	1.71%		
			·			

6.86%

Table 8. Pedestrian Candidate Projects, Subranked Evaluation Score Summary

The quantitative process for identifying Candidate Projects was presented to the BPAC at its regular meeting on June 28, 2001. Public participation at the meeting was good, with 23 people participating in the meeting. Meeting attendees were asked to review the list of Candidate Projects. Divided into small groups for discussion, each group was asked to review the limits of the segments that had been identified through the initial analysis and comment on the need to expand or reduce the project length based on local knowledge. No segments were added to the Pedestrian Plan at this meeting. The committee accepted the results of this quantitative analysis and did not expand or reduce any project limits.

Upon review by the 2025 LRTP Steering Committee, the prioritized segments from the Candidate Projects list were considered for inclusion in the 2025 Pedestrian Minimum Revenue Plan, adoption in the 2025 Long Range Transportation Plan and incorporation into future TIPs.

Development of Minimum Revenue Plan

Funding Levels

Pedestrian projects are funded from a variety of local, state and federal sources. Developers of vacant land are required to construct sidewalks within the property limits at the time of development. As part of the local, state and federal roadway system, maintenance of existing facilities is performed by local Public Works departments and State FDOT Maintenance departments.

Funding sources identified as contributing to funding for projects included in the 2025 Pedestrian Plan are Surface Transportation Program (STP) funds, Transportation Enhancement funds, and Congestion Mitigation and Air Quality Improvement Program

^{1.} Based on total number of network segments and miles.

(CMAQ) funds. Traditionally, local funding sources have also funded bicycle and pedestrian improvements in Miami-Dade County. These sources are not included in the calculation of available funds for projects included in the Bicycle and Pedestrian Priority Plans and Miami-Dade Greenways Plans in order to allow those local funding sources to continue to be available for projects that are identified by other methods.

Previous Long Range Transportation Updates established a funding level of 1.5 percent of STP and CMAQ funds for bicycle and pedestrian improvements. Maintaining this funding level of 1.5 percent and recognizing the MPO's historical allocation of Enhancement funds for bicycle/pedestrian facilities of 80 percent, a total 2006-2025 funding level of \$62.15 million is projected for bicycle and pedestrian facilities. These funds are allocated as a percent of the total bicycle/pedestrian funds for this period by facility type:

- Pedestrian On-road Projects
- Bicycle On-road Projects
- Off-road Projects (Greenways).

Approximately \$4.32 million, or 7 percent of the funds available for bicycle and pedestrian improvements are allocated to pedestrian facilities.

Minimum Revenue Plan

Candidate Projects were ranked based on their final evaluation scores. Projected pedestrian funding was applied to develop the 2025 Minimum Revenue Plan. The Minimum Revenues Plan was divided into four priority categories described below.

- **Priority 1** projects are projects to be completed and opened to service by the Year 2010 or shortly thereafter. This group includes those projects needed to respond to the most pressing and current urban travel problems.
- **Priority 2** projects are improvements where project development efforts should commence before 2010, with construction of the project to take place between 2010 and 2015.
- **Priority 3** projects are improvements which are to be completed between the years 2015 and 2020. Project development activities would need to commence before the Year 2015.
- **Priority 4** projects are improvements, which are to be made in the latter part of the Plan horizon and completed by the Year 2025.

Funding is applied to Candidate Projects based on their composite evaluation score until anticipated funding is depleted. The Minimum Revenue Plan is provided in **Table 9.** *Minimum Revenue Plan* and depicted in **Figure 5**. Unfunded projects identified in the Candidate Projects List are provided in **Appendix A**.

Table 9. Minimum Revenue Plan

Priority I

		Li	Existing Sidewalk	
Area	Project	From	То	Coverage (%)
Beach / CBD	Biscayne Bd	NE 10th Av	NE 108th St	0%
Beach / CBD	Biscayne Bd	NE 108th St	NE 16th Av	0%
Beach / CBD	Biscayne Bd	NE 3rd St	NE 4th St	0%
Beach / CBD	Biscayne Bd	NE 2nd St	NE 3rd St	0%
Beach / CBD	NE 123rd St	Biscayne Bd	NE 122nd St	0%
Beach / CBD	NE 12th Av	N Miami Beach Bd	NE 167th St	0%
Beach / CBD	NE 2 Ave ¹	Biscayne Blvd	Pedestrian Promenade	0%
Central	McDonald St	Grand Av	Bird Ave	0%
Central	S Dixie Hy	Alhambra Cr	Maynada St	0%
Central	S Dixie Hy	Maynada St	Granada Blvd	0%
Central	S Dixie Hy	SW 70th Ave	SW 67th Av	0%
Central	SW 37th Av	Main Hy	Ponce De Leon Blvd	0%
Central	SW 42nd Av	Hardee Rd	S Dixie Dr	100%
Central	SW 72nd St	SW 72nd Ave	SW 67th Av	0%
North	Biscayne Bd	NE 36th St	NE 54th St	100%
North	Biscayne Bd	NE 10th St	NE 11th St	0%
North	Griffing Bd	NE 135th St	N Miami Av	0%
North	N Federal Hy	NE 36th St	NE 54th St	0%
North	NE 13th St	Bayshore Dr	Mac Arthur Cy	100%
North	NW 95th St	NW 32nd Av	NW 27th Av	0%
Northwest	Hialeah Ex	W 10th Ave	W 8th Av	0%
Northwest	Hialeah Ex	W Okeechobee Rd	W 10th Ave	0%
Northwest	W 68th St	Sr 826 Ex	W 16th Av	0%
Northwest	W Okeechobee Rd	NW 103rd St	W 18th Av	0%
Northwest	W Okeechobee Rd	W 12th Ave	NW South River Dr	0%
Northwest	W Okeechobee Rd	NW South River Dr	W 12th Ave	0%
South	SW 97th Av	SW 184th St	SW 175th Te	100%
West	SW 8th St	SW 82nd Ave	SW 76th Ct	0%
West	SW 8th St	SW 122nd Av	SW 112th Ave	0%

^{1.} Included in the Non-Motorized Component of the 2002-2006 Miami-Dade Transportation Improvement Program

Table 9. Minimum Revenue Plan (continued)

Priority II

	Limits			Existing Sidewalk
Area	Project	From	To	Coverage (%)
Beach / CBD	Biscayne Bd	SE 2nd St	SE 1St St	0%
Beach / CBD	Biscayne Bd	NE 1St St	NE 2nd St	0%
Beach / CBD	Biscayne Bd	NE 4th St	NE 5th St	0%
Beach / CBD	Biscayne Bd	SE 3rd St	SE 2nd St	0%
Beach / CBD	Dade Bd	Alton Rd	Meridian Av	0%
Beach / CBD	NE 15th Av	NE 167th St	NE 171St St	25%
Beach / CBD	NE 19th Av	NE 163rd St	NE 167th St	100%
Beach / CBD	NE 2nd Av	NE 103rd St	NW 111th St	0%
Beach / CBD	NW 119th St	NE 2nd Av	W Dixie Hy	0%
Beach / CBD	SE 4th St	S Miami Av	SE 1St Pl	0%
Central	Alhambra Cr	Blue Rd	SW 40th St	0%
Central	E Okeechobee Rd	E 1St Av	East Dr	0%
Central	Granada Bd	Ponce De Leon Blvd	Blue Rd	0%
Central	Granada Bd	Hardee Rd	S Dixie Hy	0%
Central	Granada Bd	Blue Rd	SW 40th St	0%
Central	NW 11th St	NW 32nd Av	NW 27th Av	100%
Central	Ponce De Leon Bd	Maynada St	Granada Blvd	0%
Central	S Dixie Hy	SW 42nd Ave	Grand Av	100%
Central	S Royal Poinciana Bd	Hook St	East Dr	100%
Central	SW 1St St	SW 22nd Avrd	SW 22nd Av	0%
Central	SW 32nd Av	S Dixie Hy	SW 22nd St	0%
Central	SW 40th St	University Dr	Segovia St	0%
Central	SW 40th St	Granada Blvd	University Dr	0%
Central	SW 40th St	Segouia St	SW 42nd Av	0%
Central	SW 57th Av	Blue Rd	SW 40th St	0%
Central	SW 57th Av	SW 64th St	SW 56th St	75%
Central	SW 57th Av	S Dixie Hy	SW 64th St	75%
Central	SW 67th Av	SW 72nd St	SW 64th St	75%
Central	SW 8th St	SW 47th Av	SW 44th Av	100%
North	Mac Arthur Cy	Biscayne Bd	NE 13th St	0%

Table 9. Minimum Revenue Plan (continued)

Priority II (continued)

	Limits			Existing Sidewalk
Area	Project	From	То	Coverage (%)
North	N Miami Av	NW 111th St	NW 119th St	0%
North	NE 12th Av	NE 125th St	NE 135th St	0%
North	NE 16th Av	W Dixie Hy	NE 151St St	50%
North	NE 16th Av	NE 159th St	NE 163rd St	5%
North	NW 103rd St	NW 7th Av	NW 2nd Av	100%
North	NW 14th St	NW 17th Av	NW 14th Av	95%
North	NW 183rd St	NW 7th Av	NW 2nd Av	100%
North	NW 183rd St	NW 22nd Av	NW 17th Av	100%
North	NW 183rd St	NW 12th Av	NW 7th Av	100%
North	NW 183rd St	NW 27th Av	NW 22nd Av	100%
North	NW 183rd St	NW 32nd Av	NW 27th Av	100%
North	NW 2nd Av	NW 17th St	NW 20th St	25%
North	NW 3rd Ct	I 95 Ex	NW 8th St	0%
North	NW 6th Av	NW 54th St	NW 62nd St	0%
North	NW 72nd St	NW 22nd Av	NW 19th Av	0%
North	NW 95th St	NW 22nd Av	NW 17th Av	0%
North	NW 95th St	NW 27th Av	NW 22nd Av	0%
North	NW 95th St	NW 12th Ave	NW 7th Av	0%
North	NW 95th St	NW 7th Av	NW 2nd Av	90%
North	NW North River Dr	NW 22nd Av	NW 17th Av	100%
Northwest	Hialeah Ex	W 8th Ave	W 4th Ave.	0%
South	NE 8th St	N Krome Ave	NE 5th Ave	0%
West	SW 117th Av	SW 24th St	SW 112th Ave	0%
West	SW 127th Av	SW 104th St	SW 88th St	100%
West	SW 24th St	SW 112th Ave	SW 107th Av	100%
West	SW 24th St	Asw 117th Ave	SW 112th Av	100%
West	SW 24th St	SW 97th Ave	SW 92nd Av	100%
West	SW 24th St	SW 107th Ave	SW 102nd Av	100%
West	SW 88th St	SW 117th Ave	SW 112th Av	100%
West	SW 88th St	SW 107th Ave	SW 97th Av	100%
West	SW 8th St	SW 107th Ave	SW 102nd Av	0%

Table 9. Minimum Revenue Plan (continued)

Priority III

		Li	Existing Sidewalk	
Area	Project	From	To	Coverage (%)
Beach / CBD	Biscayne Bd	NE 123rd St	NE 135th St	100%
Beach / CBD	Biscayne Bd	Sans Souci Bd	NE 123rd St	25%
Beach / CBD	N Miami Beach Bd	NE 167th St	NE 10th Av	100%
Beach / CBD	N Miami Beach Bd	NE 10th Av	NE 12th Av	100%
Beach / CBD	NE 163rd St	NE 16th Av	NE 18th Av	100%
Beach / CBD	NE 163rd St	NE 12th Av	NE 15th Av	100%
Beach / CBD	NE 163rd St	NE 19th Av	NE 22nd Av	100%
Beach / CBD	SE 2nd Av	SE 2nd St	SE 1st St	100%
Beach / CBD	SE 3rd St	SE 2nd Av	NE 3rd Av	100%
Beach / CBD	SW 1st St	SW 2nd Av	NW 1st Ct	100%
Beach / CBD	SW 8th St	SW 12th Av	SW 10th Av	100%
Beach / CBD	W Flagler St	NW 12th Av	SW 10th Av	100%
Central	Brickell Av	SE 13th St	SE 8th St	100%
Central	Curtiss Py	Hunting Lodge Dr.	Curtiss Py Roundabout	25%
Central	NW 7th St	NW 27th Av	NW 22nd Av	100%
Central	S Dixie Hy	SW 32nd Ave	SW 27th Av	100%
Central	S Miami Av	SW 17th Ave	S Dixie Hy	25%
Central	SW 22nd St	SW 37th Ave	SW 32nd Av	100%
Central	SW 37th Av	S Dixie Hy	Bird Ave	100%
Central	SW 40th St	Ponce De Leon Blvd	SW 37th Av	100%
Central	SW 40th St	SW 42nd Ave	Ponce De Leon Bd	100%
Central	SW 42nd Av	Andalusia Av	Miracle Mile	100%
Central	SW 42nd Av	Coral Wy	Alhambra	100%
North	Biscayne Bd	NE 79th St	NE 82nd St	100%
North	Biscayne Bd	NE 8th St	NE 10th St	50%
North	Biscayne Bd	Mac Arthur Cy	NE 13th St	50%
North	Biscayne Bd	NE 11th St	Mac Arthur Cy	50%
North	Biscayne Bd	NE 71st St	NE 79th St	100%
North	Biscayne Bd	NE 54th St	NE 61st St	75%
North	Biscayne Bd	NE 82nd St	NE 87th St	75%
North	Biscayne Bd	NE 61st St	NE 62nd St	100%

Table 9. Minimum Revenue Plan (continued)

Priority III (continued)

			Limits		
Area	Project	From	То	Coverage (%)	
North	NE 135th St	Griffing Bd	NE 6th Av	100%	
North	NE 135th St	NE 6th Av	NE 10th Av	100%	
North	NE 163rd St	NE 18th Av	NE 19th Av	100%	
North	NE 167th St	N Miami Av	NE 6th Av	100%	
North	NE 2nd Av	NE 54th St	NE 61st St	0%	
North	NE 6th Av	NE 159th St	NE 167th St	100%	
North	NE 6th Av	NE 135th St	NE 151st St	100%	
North	NE 6th Av	W Dixie Hy	NE 135th St	100%	
North	NW 10th Av	NW 20th St	NW 29th St	100%	
North	NW 10th St	NW 5th Av	NW 3rd Av	100%	
North	NW 183rd St	NW 37th Av	NW 32nd Av	100%	
North	NW 22nd Av	NW 54th St	NW 62nd St	100%	
North	NW 22nd Av	NW 62nd St	NW 71st Te	100%	
North	NW 27th Av	NW 46th St	NW 54th St	100%	
North	NW 27th Av	NW 183rd St	NW 191st St	100%	
North	NW 27th Av	Sr 826 Ex	NW 175th St	100%	
North	NW 27th Av	NW 175th St	NW 183rd St	100%	
North	NW 27th Av	NW 103rd St	NW 119th St	100%	
North	NW 2nd Av	NW 183rd St	NW 191st St	100%	
North	NW 7th Av	NW 95th St	NW 103rd St	100%	
North	Opa Locka Bd	Ali Baba Av	NW 27th Av	100%	
Northwest	NW 103rd St	W 24th Av	W 49th St	50%	
Northwest	W 24th Av	W 56th St	W 60th St	100%	
Northwest	W 49th St	W 16th Av	W 12th Av	100%	
Northwest	W Flagler St	NW 79th Av	NW 72nd Av	75%	
South	N Krome Av	NE 4th St	NW 8th St	100%	
West	SW 107th Av	SW 40th St	SW 32nd Ct	100%	
West	SW 107th Av	SW 24th St	SW 16th St	100%	
West	SW 72nd St	SW 117th Ave	SW 107th Av	100%	

Table 9. Minimum Revenue Plan (continued)

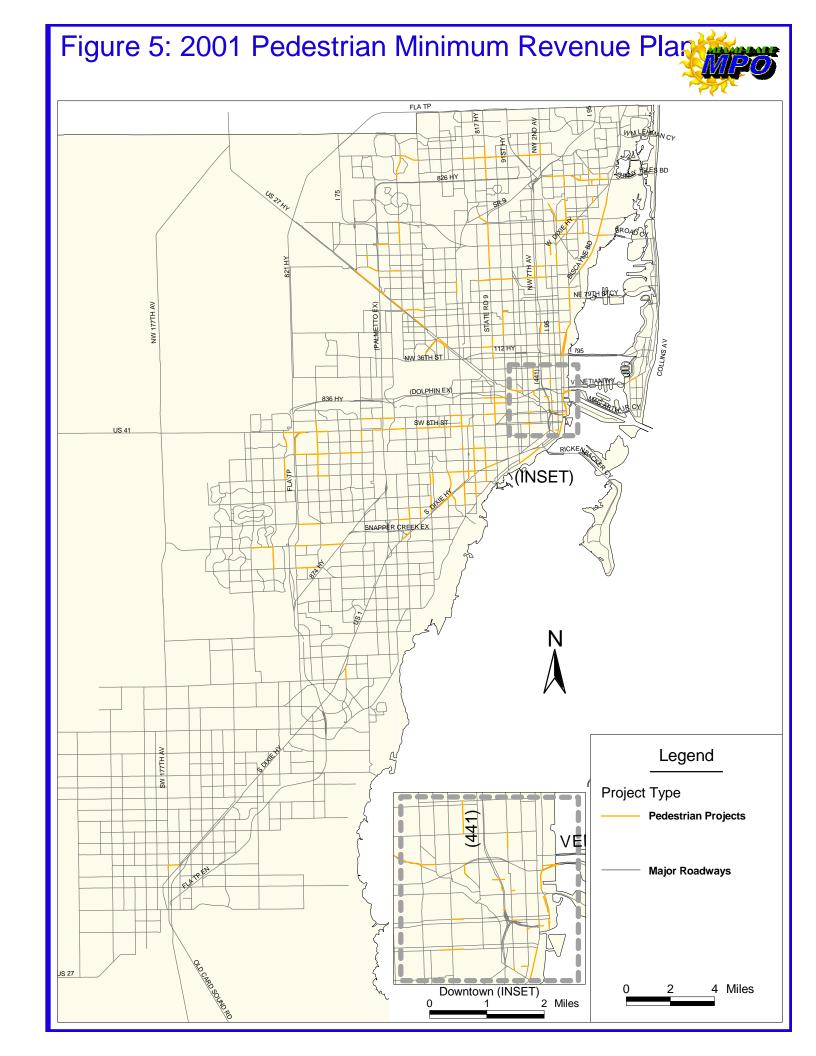
Priority IV

		Limits		Existing Sidewalk
Area	Project	From	To	Coverage (%)
	Biscayne Bd	NE 4th St	Port Bd	100%
	Biscayne Bd	NE 1st St	NE 2nd St	100%
Beach / CBD	Biscayne Bd	E Flager St	NE 1st Ave	100%
Beach / CBD	Biscayne Bd	NE 3Rd Ave	Biscayne Bd	100%
Beach / CBD	Biscayne Bd	SE 4th St	SE 3rd St	100%
Beach / CBD	Biscayne Bd	SE 3rd St	Chopin Plaza	100%
Beach / CBD	Biscayne Bd	NE 135th St	NE 151st St	100%
Beach / CBD	NE 2nd St	Biscayne Bd	Biscayne Bd	100%
Beach / CBD	NW 2nd St	NW 3Rd Ct	NW 3Rd Av	100%
Beach / CBD	NW 7th St	NW 2nd Av	NW 1st Ct	0%
Beach / CBD	SE 3rd St	Biscayne Bd	Biscayne Bd	100%
Beach / CBD	SW 2nd Av	SW 15th Rd	SW 13th St	100%
Beach / CBD	SW 8th St	SW 14th Av	SW 12th Av	100%
Central	Brickell Av	SE 15th Rd	SE 13th St	100%
Central	NW 11th St	NW 27th Av	NW 22nd Av	100%
Central	NW 27th Av	W Flagler St	NW 7th St	100%
Central	NW 27th Av	NW 7th St	NW 11th St	100%
Central	Ponce De Leon Bd	Greco Ave	SW 40th St	100%
Central	S Dixie Hy	Riveria Dr	SW 42nd Av	100%
Central	SW 13th St	SW 1st Ave	S Miami Av	100%
Central	SW 27th Av	SW 7th St	W Flagler St	100%
Central	SW 37th Av	Miracle Mile	Alhambra	100%
Central	SW 37th Av	Bird Av	SW 22nd St	100%
Central	SW 42nd Av	SW 8th St	W Flagler St	100%
Central	SW 62nd Av	SW 72nd St	SW 64th St	100%
Central	SW 8th St	SW 42nd Av	Ponce De Leon Bd	100%
Central	SW 8th St	SW 44th Av	SW 42nd Av	100%
Central	SW 8th St	SW 74th Av	SW 67th Av	100%
Central	SW 8th St	Ponce De Leon Bd	SW 37th Av	100%
Central	SW 8th St	SW 57th Av	Granada Bd	100%
Central	SW 8th St	SW 62nd Av	SW 57th Av	100%
Central	SW 8th St	Granada Bd	SW 47th Av	100%
Central	W Flagler St	SW 47th Av	NW 42nd Av	100%
Central	W Flagler St	NW 32nd Av	NW 27th Av	100%
North	NE 125th St	Griffing Bd	W Dixie Hy	100%
North	NE 125th St	NE 10th Av	NE 12th Av	100%
North	NW 10th Av	NW 8th Strd	NW 14th St	100%
North	NW 27th Av	NW 119th St	NW 135th St	100%
North	NW 27th Av	NW 36th St	NW 41st St	100%

Table 9. Minimum Revenue Plan (continued)

Priority IV (continued)

		L	Existing Sidewalk	
Area	Project	From	To	Coverage (%)
North	NW 46th St	NW 32nd Av	NW 27th Av	100%
North	NW North River Dr	NW 17th Av	NW 14th St	100%
Northwest	E 8th Av	E 33rd St	E 40th St	100%
Northwest	NW 183rd St	NW 67th Av	NW 57th Av	100%
Northwest	NW 67th Av	NW 169th St	NW 183rd St	100%
Northwest	SW 107th Av	SW 8th St	W Flagler St	100%
Northwest	W 12th Av	W 68th St	W 76th St	100%
Northwest	W 12th Av	W 76th St	W 84th St	100%
Northwest	W Flagler St	NW 87th Av	NW 82nd Av	100%
Northwest	W Okeechobee Rd	W 8th Av	W 4th Ave.	95%
South	SW 104th St	SW 114th Pl	SW107th Ave	100%
South	SW 104th St	SW 117th Ave	SW 113th Ave	100%
West	SW 107th Av	SW 16th St	SW 8th Ave	100%
West	SW 107th Av	SW 32nd St	SW 24th St	100%
West	SW 122nd Av	SW 18th St	SW 10th St	100%
West	SW 122nd Av	SW 40th St	SW 26th St	100%
West	SW 24th St	SW 92nd Ave	SW 87th Av	100%
West	SW 40th St	SW 107th Ave	SW 102nd Av	100%
West	SW 87th Av	SW 16th St	SW 8th Ave	100%
West	SW 88th St	SW 137th Ave	SW 127th Av	100%



Implementation

The implementation of bicycle and pedestrian projects has traditionally been piece-meal, requiring focused support for individual projects. Projects constructed in this manner, either by individuals, communities or specific interest groups, does not produce an integrated bicycle or pedestrian network. Recognition that a single plan should guide the prioritization of projects is required to maximize the resources available for bicycle and pedestrian projects. Implementation of an overall plan intended to increase mobility that is based on data and established community priorities requires that funding for bicycle and pedestrian projects identified as high priority in the Adopted Plans be included in the standard process for funding transportation projects.

Recognition of Adopted Plans

Communities and interest groups have historically prepared applications for Federal Enhancement funds to implement bicycle and pedestrian projects. Public Works Departments, responsible for maintaining the bicycle and pedestrian infrastructure, also construct new facilities when existing roads are resurfaced or widened. Parks and Recreation Departments and School Boards construct bicycle and pedestrian facilities when they serve the facilities each is responsible for providing. The first step in unifying the implementation of bicycle and pedestrian facilities is the recognition of the Bicycle and Pedestrian Plans developed by the Metropolitan Planning Organization as the Adopted Plans for the Miami-Dade Urbanized Area. It is recommended that the MPO undertake the following steps in support of the successful recognition of the adopted MPO Plans:

- 1) Disseminate the Adopted Plans to individuals, interest groups, municipalities and agencies/departments that have traditionally been active in implementation of bicycle and pedestrian projects.
- Create a mailing list that includes prior Enhancement Application applicants, bicycle shops/clubs, municipalities within the county, BPAC members, elected officials, representatives of the Miami-Dade Visitors and Convention Bureau, senior staff of the Miami-Dade County School Board, senior staff of the Departments within the County that have a role in providing or maintaining bicycle and pedestrian facilities and members of the general public who request inclusion.
- <u>Distribute the Executive Summary/brochure</u> summarizing the Adopted Plans to the mailing list. Identify the key dates in the process of Adopted Plan development and provide contact information to increase participation in the development of future plans.
- Present the Adopted Plans to interested community groups, County/municipal staff and elected officials that have a role in providing or maintaining bicycle and pedestrian facilities. Outline the extensive data collection efforts and develop a buy-in for the process of basing project selection on data and the development of a multi-modal network that enhances mobility. Develop a video that may accompany copies of the Plans and Suitability Maps to community meetings and that may be aired on public access television channels. Identify that the Adopted

- MPO Bicycle and Pedestrian Plans are the tools for directing the implementation of bicycle and pedestrian projects.
- Require that bicycle and pedestrian projects submitted for any matching funds (local, state or federal) are included in the Adopted Minimum Revenue Bicycle or Pedestrian Plan.
- Solicit comments and recommendations from participants in the presentations and recipients of mailed materials over the Internet, by phone and by mail about the process, the priorities, and the projects selected. Document comments and recommendations received by type and use to guide the development of future Adopted Plans.

Successful Implementation of Adopted Plans

Bicycle and Pedestrian projects have not historically been recognized in the transportation project implementation process utilized for highway and transit projects. The MPO adopts its Transportation Improvement Plan annually and may revise it at every MPO meeting to reflect changes in schedules for the planning, engineering or construction of projects within the TIP. The TIP documents the progression of a project through the required phases of implementation for the project type. Typically each bicycle and pedestrian project is viewed as unique, even compared to other bicycle or pedestrian projects. This has come to signify that each project must have an individually tailored approach. As long as this remains the case, bicycle and pedestrian projects will continue to be isolated and not become part of Miami-Dade County's overall transportation system, mainstreamed into the overall approach to implementing transportation projects. Each requirement for individual attention and monitoring only insures that something will be left out, or the time to perform the individual work will not be available. The first step in developing a continuous flow of bicycle and pedestrian projects from identification of priorities to ribbon-cutting is the standardization of the process:

- Develop a process for the implementation of bicycle and pedestrian projects in coordination with FDOT District 6 and other implementing and permitting agencies that meets the need for planning, engineering and construction management of these project types while minimizing exceptions to the current process employed by the FDOT or other agencies for the implementation of highway projects.
- Meet with the FDOT and other implementing agencies to identify the types of studies, process and reviews currently employed for highway projects that would be applicable to the implementation of bicycle and pedestrian projects. Assess the completeness of the current studies, process and reviews to meet the minimum needs for implementation of a bicycle or pedestrian project.
- Coordinate with the South Florida Water Management District to identify projects by type and develop the minimum permitting requirements for each project type. Document categorical exemptions for certain project types to expedite the construction and reduce the cost of implementation.

- Create a process flow chart to document the studies, process and reviews applicable to typical bicycle and pedestrian projects. Identify the circumstances when other studies, processes of reviews may be necessary (facility crosses a bridge, for example).
- Develop a handbook for the effective implementation of bicycle and pedestrian projects in the Miami-Dade MPO that details the process established after consultation with implementing and permitting agencies. Identify contact persons at each agency that can address issues not documented in the handbook.
- Implement the process developed and monitor its effectiveness semi-annually to determine if improvements/modifications are indicated. Report the effectiveness of the process and recommendations for improvement to the MPO Governing Board.

The second step in successful implementation of Adopted Plans is to monitor the progress of projects through the process to develop a baseline understanding of the give and take necessary to move a project to completion. The monitoring should include a decision-making process that permits the re-prioritization of projects if delay is encountered in order to permit another project to move forward and it should include regular amendments to the TIP to recognize changes in project schedules. Inclusion in the TIP makes any delays or accelerations known to interested parties.

- 2) Establish a process that is inclusive and provides for regular update to the Five-Year Bicycle and Pedestrian Implementation Plans.
- Update the Plans annually to recognize constraints and opportunities created in the implementation of priority projects. Establish a five-year plan for implementation of the highest priority projects that recognizes the time required to perform the engineering design, environmental permitting and construction letting associated with a project. Use the Five-Year Bicycle and Pedestrian Implementation Plan as the basis for including projects in the Transportation Improvement Plan (TIP) of the Miami-Dade MPO.

Monitor the progress of initial implementation schedules and adjust expectations accordingly to realistically represent the time it takes to implement projects in the Adopted Plans. Request progress reports from the implementing agency Project Managers regularly and understand the cause of delays that are identified. Document delays by type and develop strategies to expedite the solution of delays that are documented as "typical" to a project type.

Maintain a list of "next" priority projects from the Adopted Plans to include in the implementation schedule if delays are encountered on projects in the TIP. Amend the TIP as required to maintain a steady flow of projects from planning to engineering to construction. Establish goals for performance that are shared with the Florida Department of Transportation District 6 that allow the MPO to guide the implementation of bicycle and pedestrian projects.

- Build a constituency from the mailing list of interested individuals and communities and provide notice of key dates in the process when the progress of projects in the TIP are reviewed and delays and opportunities are identified. Schedule progress reviews at least semi-annually and document trends in delays and progress that may require additional action or recognition to keep a project on schedule. Use the constituents to assist in limiting the delays by expediting permitting, providing personnel or expertise. Include the Public Works and Planning staff of the municipalities within the County as a core resource in the progress review.
- Publish key dates in the process in the newspaper, on the MPO Website, at bicycle shops, in community newsletters and through inter-local communication tools available to the MPO. Disseminate changes in project schedules to the mailing list of interested parties to increase awareness of delays and projects accelerations, managing expectations about project completion dates.

The third step in successful implementation of Adopted Plans is maintenance of the data and re-evaluation of priorities on a regular basis. The MPO updates its Long Range Transportation Plan every three years. The Adopted Bicycle and Pedestrian Plans should remain a part of this regular process. For the 2025 Update to the LRTP, data collection efforts were extensive, producing a database of baseline physical conditions for bicycle and pedestrian facilities. Subsequent data collection efforts may be reduced, building on the 2025 Update efforts. The 2025 Update also saw the establishment of Evaluation Criteria that were employed to rank bicycle and pedestrian projects within the Miami-Dade Urbanized Area.

- 3) To remain relevant, the 2000 Bicycle and Pedestrian Database developed as part of the 2025 LRTP Update should be maintained, with additional review afforded at each LRTP Update. The process should be expanded both in time and scope to build support for future projects and to include participation by a more diverse segment of the community.
- Maintain a record of improvements to bicycle and pedestrian facilities to facilitate the update of the 2000 Bicycle and Pedestrian Database. Map the improvements semi-annually to make the information available on a timely basis. Survey the improvements as completed and enter new data in the 2000 Bicycle and Pedestrian Database semi-annually. Post the completion of projects and improvement of existing facilities on the Internet and make the information available to clubs and organizations that serve the bicycling/walking public, including tourists.
- <u>Update the 2000 Bicycle and Pedestrian Database with each LRTP Update.</u> Survey all facilities in the Adopted Priority Plan, new facilities and facilities for which re-survey is requested by an implementing or maintenance agency. Update the Database accordingly.

- LRTP Update and develop public outreach programs. The process of building consensus for bicycle and pedestrian projects takes longer than the process for developing highway and transit priorities. The impact of bicycle and pedestrian projects is local, until a network is developed where improvements than enhance the network. Communities impacted by proposed projects are located throughout the Miami-Dade Urbanized Area. Public participation should include those communities in which the priority projects are located.
- Expand the process to include the development of Corridor Plans that include improvements that are beyond the scope of a stand-alone bicycle or pedestrian project. While the pedestrian network in the Miami-Dade County provides good connectivity with nearly 62% of all links analyzed having 100% sidewalk coverage, the pedestrian environment may be improved. Several factors such as ADA access and obstructions within the sidewalk and safety issues related to pedestrian crossing volumes at intersections and demand for mid-block pedestrian crossings were not evaluated in the development of the pedestrian priority plan. Nor was sidewalk capacity in relation to the pedestrian volume evaluated which may affect the level of service in high use areas such as Miami Beach. Corridor Plans should be used to address these aspects of the pedestrian environment, increasing pedestrian safety, contributing to the economic vitality of the corridor and increasing the pedestrian mode share.



Appendix A

		Li	mits	Existing
Area	Project or Facility	From	То	Coverage
Beach / CBD	71st St	Abbott Av	Collins Av	100.00%
Beach / CBD	Biscayne Bd	NE 187th St	NE 191st St	10.00%
Beach / CBD	Biscayne Bd	NE 172nd St	NE 186th St	100.00%
Beach / CBD	Biscayne Bd	NE 208th St	Avntura Hospital	100.00%
Beach / CBD	Biscayne Bd	NE 191st St	Avntura BD	0.00%
Beach / CBD	Brickell Av	SE 7th St	SW 6th St	100.00%
Beach / CBD	Brickell Av	SE 8th St	SE 7th St	100.00%
Beach / CBD	Collins Av	Sunny Isles Bd	Terracini Av	100.00%
Beach / CBD	COLLINS Av	5th St	11th St	100.00%
Beach / CBD	NE 125th St	NE 12th Av	NE 16th Av	100.00%
Beach / CBD	NE 15th Av	NE 163rd St	NE 167th St	100.00%
Beach / CBD	NE 163rd St	NE 15th Av	NE 16th Av	100.00%
Beach / CBD	NE 185th St	NE 10th Av	NE 15th Av	0.00%
Beach / CBD	NE 19th Av	NE 171st St	NE 18th rd	100.00%
Beach / CBD	NE 1st St	NE 1St Av	NE 2nd Av	100.00%
Beach / CBD	NE 2nd Av	NW 111th St	W DIXIE HY	75.00%
Beach / CBD	NE 2nd Av	NE 96th St	NE 103rd St	100.00%
Beach / CBD	NE 3rd Av	SE 4th St	SE 3rd St	100.00%
Beach / CBD	NE 79th St CY	NE 79th St	Normandy Dr	100.00%
Beach / CBD	Normandy Dr	Rue Notre Dame	71st St	100.00%
Beach / CBD	NW 1St Av	SW 1st St	W Flagler St	100.00%
Beach / CBD	NW 1St CT	SW 2nd St	SW 1st St	100.00%
Beach / CBD	NW 2nd St	NW 3rd Av	NW 2nd CT	100.00%
Beach / CBD	NW 2nd St	NW 1St Av	N Miami Av	100.00%
Beach / CBD	NW 3rd Av	NW 11th St	NW 14th St	100.00%
Beach / CBD	S Biscayne Bd	SE 1st St	Biscayne Bd	100.00%
Beach / CBD	S Miami Av	SE 2nd St	SE 1st St	100.00%
Beach / CBD	S Miami Av	SE 7th St	SW 1St Av	100.00%
Beach / CBD	S Miami Av	SE 1st St	E Flagler St	100.00%

		L	imits	Existing
Area	Project or Facility	From	То	Coverage
Beach / CBD	S Miami Av	SW 3rd St	SE 2nd St	100.00%
Beach / CBD	SE 1St Av	SE 4th St	SE 2nd St	100.00%
Beach / CBD	SE 1st St	S Miami Av	SE 1St Av	100.00%
Beach / CBD	SE 1st St	Biscayne Bd	Biscayne Bd	100.00%
Beach / CBD	SE 1st St	SE 1St Av	SE 2nd Av	100.00%
Beach / CBD	SE 1st St	NE 3rd Av	Biscayne Bd	100.00%
Beach / CBD	SE 1st St	SE 2nd Av	NE 3rd Av	100.00%
Beach / CBD	SE 2nd Av	SW 6th St	SE 4th St	100.00%
Beach / CBD	SE 2nd Av	SE 4th St	SE 3rd St	100.00%
Beach / CBD	SE 2nd Av	SE 4th St	SE 4th St	100.00%
Beach / CBD	SE 2nd Av	SE 3rd St	SE 2nd St	100.00%
Beach / CBD	SE 2nd St	S Miami Av	SE 1St Av	100.00%
Beach / CBD	SE 2nd St	SE 1St Av	SE 2nd Av	100.00%
Beach / CBD	SE 2nd St	SE 2nd Av	NE 3rd Av	100.00%
Beach / CBD	SE 4th St	SE 2nd Av	NE 3rd Av	100.00%
Beach / CBD	SE 7th St	S Miami Av	Brickell Av	100.00%
Beach / CBD	SE 8th St	S Miami Av	Brickell Av	100.00%
Beach / CBD	SW 13th St	SW 2nd Av	SW 1St Av	100.00%
Beach / CBD	SW 1St Av	SW 7th St	S Miami Av	100.00%
Beach / CBD	SW 1st St	SW 12th Av	SW 10th Av	100.00%
Beach / CBD	SW 1st St	SW 8th Av	SW 6th Av	100.00%
Beach / CBD	SW 1st St	NW 14th Av	SW 12th Av	100.00%
Beach / CBD	SW 1st St	SW 17th Av	NW 14th Av	100.00%
Beach / CBD	SW 1st St	SW 19th Av	SW 17th Av	100.00%
Beach / CBD	SW 1st St	NW 1St Av	S Miami Av	100.00%
Beach / CBD	SW 1st St	NW 1St CT	NW 1St Av	100.00%
Beach / CBD	SW 2nd Av	SW 7th St	SW 3rd St	100.00%
Beach / CBD	SW 2nd St	NW 1St Av	S Miami Av	100.00%
Beach / CBD	SW 7th St	SW 2nd Av	SW 1St Av	100.00%

		Limits		Existing
Area	Project or Facility	From	То	Coverage
Beach / CBD	SW 8th Av	SW 7th St	SW 1st St	100.00%
Beach / CBD	SW 8th St	SW 1St Av	S Miami Av	100.00%
Beach / CBD	W Dixie Hy	NE 171st St	NE 186th St	0.00%
Beach / CBD	W DIXIE HY	NE 186th St	NE 193rd St	100.00%
Beach / CBD	W Flager St	NW 2nd Av	NW 1St Av	100.00%
Beach / CBD	W Flagler St	NW 14th Av	NW 12th Av	100.00%
Beach / CBD	W Flagler St	SW 19th Av	NW 17th Av	100.00%
Beach / CBD	W Flagler St	SW 10th Av	SW 8th Av	100.00%
Beach / CBD	W Flagler St	NW 1St Av	N Miami Av	100.00%
Central	Curtiss Py	Curtiss Py Roundabout	E Okeechobee rd	100.00%
Central	Curtiss Py Roundabout	N Royal Poinciana Bd	Curtiss Py	0.00%
Central	Curtiss Py Roundabout	S Royal Poinciana Bd	Curtiss Py	0.00%
Central	Curtiss Py Roundabout	Curtiss Py	S Royal Poinciana Bd	0.00%
Central	Curtiss Py Roundabout	Westward Dr	N Royal Poinciana Bd	0.00%
Central	Curtiss Py Roundabout	Curtiss Py	Westward Dr	0.00%
Central	E 9th St	E 4th Av	E 8th Av	25.00%
Central	E 9th St	E 1St Av	E 4th Av	100.00%
Central	E 9th St	E 8th Av	NW 62nd St	50.00%
Central	E Okeechobee Rd	Curtiss Py	E 1St Av	100.00%
Central	GRAnd Av	S DIXIE Dr	SW 37th Av	100.00%
Central	HOOK St	S Royal Poinciana Bd	E Okeechobee rd	100.00%
Central	Miracle Mile	SW 42nd Av	Ponce De Leon Bd	100.00%
Central	NW 36th St	East Dr	N Le Jeune Rd	50.00%
Central	PALM Av	W Okeechobee rd	E 5th St	100.00%
Central	S Miami Av	SW 13th St.	SE 8th St	100.00%
Central	Sevilla Av	Alhambra Cr	Anastasia Av	0.00%
Central	SW 1St Av	SW 13th St	SW 8th St	100.00%
Central	SW 27th Av	S DIXIE HY	SW 22nd St	100.00%
Central	SW 57th Av	SW 40th St	Seville Av	75.00%

		Limits		Existing
Area	Project or Facility	From	То	Coverage
Central	SW 64th St	SW 72nd Av	SW 67th Av	0.00%
Central	SW 67th Av	SW 64th St	SW 5th St	100.00%
Central	SW 72nd St	SW 62nd Av	S Dixie Hy	100.00%
Central	SW 7th St	SW 27th Av	SW 22nd Av	100.00%
Central	SW 8th St	Brickell Av	Brickell Key Dr	100.00%
Central	SW 8th St	SW 67th Av	SW 62nd Av	100.00%
Central	W 9th St	W 4th Av	PALM Av	100.00%
North	Biscayne Bd	NE 6th St	NE 8th St	100.00%
North	Biscayne Bd	NE 87th St	NE 6th Av	100.00%
North	Biscayne Bd	NE 6th Av	NE 95th St	75.00%
North	MAC Arthur Cy	Biscayne Bd	NE 12th St	50.00%
North	N Miami Av	NE 62nd St	NE 71st St	100.00%
North	N Miami Av	NE 36th St	NE 46th St	100.00%
North	NE 10th Av	NE 82nd St	NE 95th St	0.00%
North	NE 125th St	NE 6th Av	NE 10th Av	100.00%
North	NE 12th Av	NE 159th St	N Miami Beach Bd	50.00%
North	NE 12th Av	NE 151st St	NE 159th St	50.00%
North	NE 12th Av	W Dixie Hy	NE 151st St	25.00%
North	NE 14th St	NE 1St Av	NE 2nd Av	100.00%
North	NE 159th St	N Miami Av	NE 6th Av	0.00%
North	NE 159th St	NE 10th Av	NE 12th Av	100.00%
North	NE 159th St	NE 15th Av	NE 16th Av	50.00%
North	NE 159th St	NE 12th Av	NE 15th Av	50.00%
North	NE 2nd Av	NE 82nd St	NE 87th St	100.00%
North	NE 2nd Av	NE 36th St	NE 42nd St	100.00%
North	NE 2nd Av	NE 79th St	NE 82nd St	100.00%
North	NE 2nd Av	NE 71st St	NE 79th St	75.00%
North	NE 2nd Av	NE 61st St	NE 71st St	50.00%
North	NE 2nd Av	NE 46th St	NE 54th St	75.00%

			Limits	Existing
Area	Project or Facility	From	То	Coverage
North	NE 2nd Av	NE 42nd St	NE 46th St	100.00%
North	NE 36th St	N Miami Av	NE 2nd Av	0.00%
North	NE 36th St	Biscayne Bd	Julia Tuttle Cr	100.00%
North	NE 62nd St	N Miami Av	NE 2nd Av	100.00%
North	NE 6th Av	NE 167th St	NE 183rd St	100.00%
North	NE 6th Av	NE 151st St	NE 159th St	100.00%
North	NE 79th St	Biscayne Bd	NE 10th Av	100.00%
North	NW 103rd St	NW 12th Av	NW 7th Av	100.00%
North	NW 11th St	NW 7th Av	NW 5th Av	100.00%
North	NW 12th Av	NW 20th St	NW 29th St	100.00%
North	NW 12th Av	NW 71st St	NW 73rd St	100.00%
North	NW 12th Av	NW 11th St	NW 14th St	100.00%
North	NW 12th Av	NW 14th St	NW 20th St	100.00%
North	NW 12th Av	NW 62nd St	NW 71st St	100.00%
North	NW 12th Av	NW 54th St	NW 62nd St	100.00%
North	NW 12th Av	NW 46th St	NW 54th St	100.00%
North	NW 12th Av	NW 29th St	NW 36th St	100.00%
North	NW 12th Av	NW 36th St	NW 40th St	100.00%
North	NW 14th Av	NW 15th St	NW 20th St	100.00%
North	NW 14th St	NW 14th Av	NW 12th Av	100.00%
North	NW 14th St	NW 3rd Av	NW 2nd Av	101.00%
North	NW 159th St	NW 2nd Av	N Miami Av	0.00%
North	NW 167th St	NW 57th Av	NW 47th Av	0.00%
North	NW 17th Av	NW 71st St	NW 79th St	100.00%
North	NW 17th Av	NW 157th St	NW 167th St	0.00%
North	NW 17th Av	NW 46th St	NW 54th St	100.00%
North	NW 17th Av	NW 62nd St	NW 71st St	100.00%
North	NW 183rd St	NW 2nd Av	NE 183rd St	100.00%
North	NW 183rd St	NW 17th Av	NW 12th Av	100.00%

		Li	mits	Existing
Area	Project or Facility	From	То	Coverage
North	NW 19th Av	NW 71st St	NW 72nd St	0.00%
North	NW 20th St	NW 12th Av	NW 9th Av	100.00%
North	NW 22nd Av	NW 46th St	NW 54th St	100.00%
North	NW 27th Av	Opa Locak Bd	SR 9 Ex	100.00%
North	NW 27th Av	NW 79th St	NW 87th St	100.00%
North	NW 27th Av	NW 62nd St	NW 71st St	100.00%
North	NW 27th Av	SR 9 Ex	Ali Baba Av	100.00%
North	NW 27th Av	NW 135th St	Opa Locka Bd	100.00%
North	NW 29th St	NW 7th Av	NW 5th Av	100.00%
North	NW 2nd Av	US 441	NW 183rd St	100.00%
North	NW 2nd Av	NW 191st St	NW 199th St	100.00%
North	NW 2nd Av	NW 54th St	NW 62nd St	100.00%
North	NW 2nd Av	NW 36th St	NW 46th St	100.00%
North	NW 2nd Av	NW 62nd St	NW 71st St	100.00%
North	NW 2nd Av	NW 46th St	NW 54th St	100.00%
North	NW 2nd Av	N Biscayne River Dr	NW 159th St	0.00%
North	NW 36th St	NW 2nd Av	N Miami Av	100.00%
North	NW 36th St	NW 5th Av	NW 2nd Av	100.00%
North	NW 36th St	NW 14th Av	NW 12th Av	100.00%
North	NW 37th Av	NW 71st St	NW 79th St	0.00%
North	NW 47th Av	NW 199th St	NW 215th St	0.00%
North	NW 54th St	NW 22nd Av	NW 17th Av	100.00%
North	NW 54th St	NW 7th Av	NW 6th Av	100.00%
North	NW 54th St	NW 32nd Av	NW 27th Av	100.00%
North	NW 62nd St	NW 17th Av	NW 12th Av	100.00%
North	NW 62nd St	NW 22nd Av	NW 17th Av	100.00%
North	NW 62nd St	NW 27th Av	NW 22nd Av	0.00%
North	NW 62nd St	NW 2nd Av	N Miami Av	100.00%
North	NW 62nd St	NW 32nd Av	NW 27th Av	100.00%

		Limits		Existing
Area	Project or Facility	From	То	Coverage
North	NW 62nd St	NW 6th Av	NW 2nd Av	100.00%
North	NW 6th Ct	NW 79th St	NW 81st St	0.00%
North	NW 71st St	NW 12th Av	NW 7th Av	100.00%
North	NW 71st St	NW 32nd Av	NW 27th Av	0.00%
North	NW 71st St	NW 17th Av	NW 12th Av	100.00%
North	NW 71st Te	NW 22nd Av	NW 19th Av	100.00%
North	NW 79th St	NW 27th Av	NW 22nd Av	100.00%
North	NW 79th St	NW 32nd Av	NW 27th Av	100.00%
North	NW 79th St	NW 17th Av	NW 81st Rd	100.00%
North	NW 79th St	NW 22nd Av	NW 17th Av	100.00%
North	NW 7th Av	NW 183rd St	NW 191st St	100.00%
North	NW 7th Av	NW 54th St	NW 62nd St	100.00%
North	NW 7th Av	NW 81st St	NW 95th St	100.00%
North	NW 7th Av	NW 20th St	NW 29th St	100.00%
North	NW 7th Av	NW 14th St	NW 17th St	100.00%
North	NW 7th Av	NW 62nd St	NW 71st St	100.00%
North	NW 7th Av	NW 36th St	NW 46th St	100.00%
North	NW 7th Av	NW 29th St	NW 36th St	100.00%
North	NW 7th Av	NW 103rd St	NW 111th St	100.00%
North	NW 81st St	NW 37th Av	NW 36th Av	0.00%
North	NW 95th St	NW 17th Av	NW 12th Av	75.00%
North	SR 826 Ex	NW 32nd Av	NW 27th Av	0.00%
North	SR 826 Ex	NW 27th Av	NW 22nd Av	0.00%
North	SR 826 Ex	NW 22nd Av	NW 17th Av	0.00%
North	SR 9 Ex Frontage Rd	NW 27th Av	SR 9 Ex	50.00%
Northwest	Hialeah Ex	NW 72nd Av	N Royal Poinciana Bd	0.00%
Northwest	NW 103rd St	W 28th Av	W 24th Av	0.00%
Northwest	NW 186th St	NW 77th Av	NW 67th Av	15.00%
Northwest	NW 67th Av	W 84th St	S Miami Lakeway	100.00%

			Limits	Existing
Area	Project or Facility	From	То	Coverage
Northwest	W 24th Av	W 60th St	W 68th St	100.00%
Northwest	W 49th St	W 4th Av	Palm Av	100.00%
Northwest	W 4th Av	W 2nd CT	NW 135th St	0.00%
Northwest	W 4th Av	W 53rd St	NW 114th St	0.00%
Northwest	W 4th Av	NW 114th St	NW 119th St	0.00%
Northwest	W 4th Av	W 33rd St	W 37th St	0.00%
Northwest	W 4th Av	W 49th St	W 53rd St	0.00%
Northwest	W Okeechobee Rd	Royal Poinciana	W Okeechobee rd	0.00%
Northwest	W Okeechobee Rd	W 18th Av	W 16th Av	100.00%
South	E MOWRY Dr	N Flager	S Homestead	0.00%
South	N Krome Av	NW 8th St	NW 15th Av	100.00%
South	NE 12th Av	NE 8th St	NE 15th St	50.00%
South	NE 8th St	NW 5th Av	N Flager Av	0.00%
South	S DIXIE HY	SW 304th St	SW 296th St	0.00%
South	S DIXIE HY	SW 120th St	SW 112th St	0.00%
South	S DIXIE HY	NE 8th St	N Flager Av	0.00%
South	SW 104th St	SW 97th Av	SW 92nd Av	0.00%
South	SW 152nd St	SW 102nd Av	SW 92nd Av	100.00%
South	SW 184th St	SW 112th Av	SW 107th Av	100.00%
South	SW 88th St	SW 112th Av	SW 107th Av	100.00%
South	SW 88th St	SW 82nd Av	SW 77th Av	100.00%
South	SW 97th Av	SW 104th St	SW 94th St	75.00%
West	SW 102nd Av	SW 56th St	SW 48th St	0.00%
West	SW 107th Av	SW 64th St	SW 56th St	100.00%
West	SW 107th Av	SW 47th TE	SW 40th St	100.00%
West	SW 24th St	SW 75th Av	SW 72nd Av	100.00%
West	SW 24th St	SW 82nd Av	SW 75th Av	50.00%
West	SW 24th St	SW 87th Av	SW 82nd Av	0.00%
West	SW 24th St	SW 72nd Av	SW 67th Av	100.00%

		Limits		Existing
Area	Project or Facility	From	То	Coverage
West	SW 40th St	SW 107th Av	SW 112th Av	100.00%
West	SW 40th St	SW 92nd Av	SW 87th Av	100.00%
West	SW 40th St	SW 97th Av	SW 92nd Av	100.00%
West	SW 47th St	SW 142nd Av	SW 137th Av	75.00%
West	SW 56th St	SW 137th Av	SW 132nd Av	0.00%
West	SW 72nd St	SW 127th Av	SW 117th Av	100.00%
West	SW 72nd St	SW 82nd Av	SW 72nd Av	100.00%
West	SW 82nd Av	SW 24th St	SW 16th Av	100.00%
West	SW 87th Av	SW 32nd St	SW 24th St	100.00%
West	SW 8th St	SW 76th CT	SW 74th Av	100.00%
West	SW 8th St	SW 132nd Av	SW 127th Av	0.00%
West	SW 8th St	SW 137th Av	SW 132nd Av	0.00%
West	SW 97th Av	SW 48th St	SW 40th St	50.00%
West	SW 97th Av	SW 72nd St	SW 64th St	0.00%
West	SW 97th Av	SW 64th St	SW 56th St	25.00%



Appendix B

Appendix B. Technical Appendix

Existing Conditions

2001 Study Pedestrian Roadway Network

The 2001 Pedestrian Road Network is based on the network developed for the 2025 Long Range Transportation Plan and any additional roads that were included in the 1997 Bicycle Plan. Road segments that are not included in the 2025 LRTP network but included in the Pedestrian Road Network are depicted on **Figure B1** and identified in **Table B1**.

The following road classification types are included in the network:

Divided Arterials (20X)

Collectors (40X)

Undivided Arterials (30X)

One Way Facilities (60X)

The Pedestrian Road Network does not include:

• Freeways (10X)

Toll Roads (80X)

Centroid Connectors (50X)

Ramps (70X)

Upon field survey, there were several road segments were not available to inventory. These segments were removed from the Road Network and include:

- Dirt or unpaved roads
- Roads that have been closed
- Private roads
- Misclassified roads (road segments identified as freeways or ramps upon field survey)

2001 Pedestrian Level of Service Analysis

The determination of the pedestrian level of service (PLOS) for each segment of the Miami-Dade Network is based on the operational planning level of service methodologies adopted by FDOT for this purpose. The PLOS model identifies the pedestrian level of service for a segment of the transportation network on a scale of A to F based on a numerical model score as shown in **Table B2**.

PLOS differs from the standard definition of level of service applied to the automobile mode in that level of service is not a function of congestion on the network facility. Key factors affecting pedestrian level of service are:

- Presence of a facility (sidewalk) and
- Separation of pedestrians from the vehicular traffic.

Figure B1 : 2000 Pedestrian Segments Analyzed in Addition to LRTP Network Legend **Project Type Additional Pedestrian** Segments **LRTP Network Major Roadways** Downtown (INSET) 4 Miles

	Limits		
Project	From	То	
Alhambra Cr	Alhambra Pz	SW 37th Ave	
Alhambra Cr	S Dixie HY	Granada Bd	
Caribbean Bd	SW 87th Ave	SW 184th St	
Davis Rd	SW 47th Ave	Old Cutler Rd	
E 21St St	E 8th Ave	E 10th Ave	
E 53rd St	Palm Ave	E 8th Ave	
E 65th St	Douglas Rd	NW 32nd Ave	
E Mowry Dr	S Homestead Bd	SW 162nd Ave	
E Mowry Dr	SW 192nd Ave	SW 187th Ave	
Grand Concourse Ave	NE 2nd Ave	NE 6th Ave	
Hardee Rd	Maynada St	SW 42nd Ave	
Hardie Ave	SW 42nd Ave	Ingraham HY	
Madison St	Lincoln Bd	SW 136th St	
Meridian Ave	5th St	W 28th St	
N Federal HY	NE 36th St	NE 54th St	
N Miami Ave	NE 167th St	NE 173rd St	
N Miami Lakeway	Miami Lakes Dr	NW 67th Ave	
NE 10th Ave	NE 95th St	Biscayne Bd	
NE 12th Ave	NE 109th St	NE 205th Te	
NE 12th Ave	NE 196th St	NE 199th St	
NE 19th Te	NE 2nd Ave	Biscayne Bd	
NE 87th St	N Miami Ave	Biscayne Bd	
NE 96th St	N Miami Ave	Biscayne Bd	
NW 106th St	NW 116th Wy	NW South River Dr	
NW 110th Ave	NW 14th St	NW 25th St	

		Limits		
Project	From	То		
NW 111th St	NW 2nd Ave	NE 6th Ave		
NW 112th Ave	W Flagler St	NW 7th St		
NW 114th St	W 60th St	W 4th Ave		
NW 11th St	NW 42nd Ave	NW 22nd Ave		
NW 11th St	NW 11th Te	NW 1St Pl		
NW 125th St	NW 11th Ave	NW 7th Ave		
NW 13th Ave	NW 155th Dr	NW 167th St		
NW 144th St	NW 42nd Ave	NW 37th Ave		
NW 14th Ave	NW 14th St	NW 15th St		
NW 151St St	N Biscayne River Dr	N Miami Ave		
NW 15th St	NW 17th Ave	NW 14th Ave		
NW 169th St	NW 77th CT	NW 67th Ave		
NW 17th Ave	NW 183rd St	NW 195th St		
NW 17th St	NW 37th Ave	Delaware PY		
NW 19th Ave	NW 71St St	NW 72nd St		
NW 1st Pl	NW 79th St	NW 83rd St		
NW 1st Pl	NW 11th St	NW 14th St		
NW 2nd Ave	NW 86th St	NW 95th St		
NW 2nd Ave	NW 83rd St	NW 85th St		
NW 34th Ave	W Flagler St	NW 17th St		
NW 42nd Ave	NW 199th St	NW 204th St		
NW 45th Ave	NW 13th St	NW 14th Te		
NW 5th Ave	NW 29th St	NW 36th St		
NW 62nd Ave	W Flagler St	NW Tamiami Canal		
NW 72nd St	NW 22nd Ave	NW 19th Ave		

		Limits
Project	From	То
NW 74th St	NW 87th Ave	NW 84th Ave
NW 7th Ave	NW 7th Ave	NW 183rd St
NW 82nd Ave	NW 12th St	NW 25th St
NW 83rd St	NW 2nd Ave	NW 1St Pl
NW 87th St	NW 36th Ave	NW 32nd Ave
NW 96th St	NW 2nd Ave	N Miami Ave
NW South River Dr	NW 5th St	SW South River Dr
Opa Locka Bd	NW 135th St	NW 27th Ave
Ponce de Leon Bd	SW 37th Ave	W Flagler St
Prairie Ave	W 28th St	W 47th St
S Miami Lakeway	NW 67th Ave	Miami Lakes Dr
Sans Souci Bd	Biscayne Bd	NE 123rd St
SE 4th St	SE 1St Ave	SE 2nd Ave
SR 9 EX	SR 9 EX	NW 22nd Ave
SR 9 EX	NW 27th Ave	NW 22nd Ave
SW 102nd Ave	SW 72nd St	SW 56th St
SW 102nd Ave	SW 152nd St	SW 147th Te
SW 107th Ave	SW 268th St	SW 248th St
SW 112th Ave	SW 95th St	SW 88th St
SW 112th Ave	SW 280th St	SW 268th St
SW 112th Ave	SW 163rd Te	SW 152nd St
SW 112th St	SW 147th Ave	SW 122nd Ave
SW 112th St	SW 161St Pl	SW 112th St
SW 113th Ave	SW 104th St	SW 96th St
SW 117th Ave	SW 248th St	SW 220th St
		•

		Limits		
Project	From	То		
SW 120th St	SW 84th Ave	S Dixie HY		
SW 120th St	SW 92nd Ave	SW 87th Ave		
SW 120th St	SW 98th CT	SW 97th Ave		
SW 120th St	SW 102nd Ave	SW 99th Ct		
SW 120th St	SW 112th Ave	SW 107th Ave		
SW 120th St	SW 152nd Ave	SW 147th Ave		
SW 120th St	SW 97th Ave	SW 92nd Ave		
SW 120th St	SW 107th Ave	SW 102nd Ave		
SW 122nd Ave	SW 122nd Ave	SW 122nd Ave		
SW 122nd Ave	SW 210th St	SW 200th St		
SW 122nd Ave	SW 248th St	SW 232nd St		
SW 124th St	SW 94th Ave	SW 87th Ave		
SW 127th Ave	SW 248th St	S Dixie Hy		
SW 127th Ave	Bougainville Bd	E Palm Dr		
SW 132nd Ave	SW 118th St	SW 112th St		
SW 134th Ave	SW 184th St	SW 176th St		
SW 137th Ave	SW 248th St	SW 240th St		
SW 147th Ave	SW 296th St	SW 280th Ave		
SW 152nd Ave	SW 152nd St	SW 142nd St		
SW 157th Ave	SW 204th St	SW 200th St		
SW 157th Ave	Orange St	SW 280th St		
SW 157th Ave	NE 8th St	S Dixie HY		
SW 160th St	SW 147th Ave	SW 137th Ave		
SW 167th Ave	Old Dixie HY	SW 296th St		
SW 168th St	SW 197th Ave	SW 177th Ave		

		nents not Included in the 2025 LRTP Network (cont.) Limits	
Project	From	То	
SW 168th St	SW 237th Ave	SW 198th Ave	
SW 176th St	SW 216th St	Old Cutler Rd	
SW 186th St	S Dixie HY	SW 97th Ave	
SW 192nd St	SW 197th Ave	SW 177th Ave	
SW 194th Ave	SW 232nd St	SW 192nd St	
SW 197th Ave	SW 525th Ln	SW 320th St	
SW 207th Ave	SW 248th St	SW 216th St	
SW 232nd St	SW 127th Ave	SW 117th Ave	
SW 232nd St	SW 217th Ave	SW 207th Ave	
SW 264th St	SW 217th Ave	SW 187th Ave	
SW 280th St	SW 132nd Ave	SW 121St St	
SW 280th St	SW 169th Ct	SW 167th Ave	
SW 280th St	SW 217th Ave	SW 187th Ave	
SW 296th St	SW 217th Ave	SW 197th Ave	
SW 304th St	NE 12th Ave	SW 157th Ave	
SW 304th St	SW 204th Ave	NW 14th Ave	
SW 320th St	NE 18th Ave	SW 117th Ave	
SW 320th St	SW 217th Ave	SW 197th Ave	
SW 328th St	SW 192nd Ave	Lucy St	
SW 368th St	SW 217th Ave	SW 212th Ave	
SW 368th St	SW 212th Ave	SW 207th Ave	
SW 4th St	SW 7th St	SW 1St St	
SW 52nd Ave	SW 88th St	SW 72nd St	
SW 62nd Ave	SW 136th St	SW 104th St	
SW 6th St	SW 22nd Ave	SW 12th Ave	

		Limits
Project	From	To
SW 72nd Ave	Tamiami Bd	W Flagler St
SW 74th Ave	SW 19th Te	SW 8th St
SW 74th Ave	SW 21St St	SW 16th St
SW 77th Ave	SW 159th St	SW 152nd St
SW 80th St	SW 57th Ave	SW 47th Ave
SW 80th St	SW 62nd Ave	SW 57th Ave
SW 82nd Ave	SW 120th St	SW 88th St
SW 82nd Ave	SW 43rd Te	SW 40th St
SW 82nd Ave	SW 72nd St	N of SW 64th St
SW 82nd Ave	S OF SW 58th St	SW 56th St
SW 82nd Ave	SW 48th St	SW 45th St
SW 92nd Ave	SW 72nd St	W Flagler St
SW 92nd Ave	SW 99th St	SW 88th St
SW 92nd Ave	SW 124th St	SW 102nd St
SW 94th St	SW 97th Ave	SW 87th Ave
SW 95th St	SW 117th Ave	SW 107th Ave
SW 97th Ave	N Snapper Creek Dr	SW 72nd St
SW 97th St	SW 152nd St	N of Country Walk Dr N
SW 99th Ave	SW 168th St	SW 160th St
SW South River Dr	SW 1St St	NW South River Dr
Tamiami Bd	SW 8th St	SW 72nd Ave
Tigertail Ave	SW 27th Ave	SW 17th Ave
Trionfo St	SW 72nd St	Alhambra Cr
W 18th Ave	W Okeechobee	W 49th St
W 28th St	Meridian Ave	Prairie Ave

	Limits	
Project	From	То
W 33rd St	W 4th Ave	Palm Ave
W 37th St	W 18th Ave	W 16th Ave
W 44th Pl	W 18th Ave	W 4th Ave
W 53rd St	W 16th Ave	Palm Ave
W 60th St	W 12th Ave	NW 114th St
Washington Ave	Alton Rd	5th St

Table B2. Pedestrian Level of Service

Level of Service	Model Score	
A	≤ 1.5	
В	>1.5 and <u><</u> 2.5	
С	$> 2.5 \text{ and} \le 3.5$	
D	$> 3.5 \text{ and} \le 4.5$	
E	$>4.5 \text{ and} \le 5.5$	
F	> 5.5	

Separation is defined as both lateral (distance) and physical (barriers). Barriers include parked cars and trees. The presence of occupied on-street parking (barrier) increases the level of service over on-street parking that is not occupied (distance only).

The LOS determinations made using the PLOS model are not commensurate with the corresponding "letter grade" level of service long recognized in Florida for vehicles. Calibrated on the basis of the educational system grading structure, an LOS of D for the pedestrian mode is not an acceptable level of service.

PLOS Model Requirements

Microsoft Excel® software is used to calculate the LOS score for each Road Network segment. PLOS software is compatible with any IBM- compatible machine with an 80486 processor or higher.

Data for following model variables requires specific field survey for each Roadway Segment to be analyzed:

- Width of outside lane
- Width of shoulder or bike lane
- Percent of segment with on-street parking
- Buffer area barrier coefficient (based on tree spacing)
- Buffer width
- Width of sidewalk
- Total number of through lanes
- Effective speed limit

Generally, data is available for the remaining following model variable: Volume of directional traffic in 15-minute period.

Latent Demand Score (LDS)

The Latent Demand Model produces a score associated with each road segment that provides an indication of the potential for pedestrian trips along the segment regardless of the status or condition of the pedestrian environment.

In a metropolitan area, the number of trips between two areas is directly related to the number of trip productions (generators) in one area and the number of trip attractions (attractors) in the other area. Certain factors reduce or impede a decision to make a trip including the distance to be traveled, the condition of the facilities used to make the trip and the time it takes to make the trip. This is true regardless of the travel mode.

The decision to make a trip by walking is affected more by the impedance factors outlined above than travel by automobile. Depending on the trip purpose, the need to carry items during the trip also plays a role in the decision to make a trip by walking. Impedances affect the decision to make a trip by walking for different trip purposes. As documented in the National Personal Transportation Survey (NPTS), people are willing to walk a longer distance to work than for shopping. The probability of making a trip by walking depends on the trip type and is reduced as the distance to be traveled increases.

Potential pedestrian trips can be divided into two categories: trips that can be made entirely by walking and trips that include another mode of travel to reach the destination. The NPTS trip distance by trip purpose is used to classify trips as non-linked. The latent demand score produced by the Latent Demand Model represents potential non-linked trips.

The Latent Demand Model assesses the attributes of the decision to make a trip by walking using a gravity-based model that produces segment-based results. The model evaluates the four general trip types identified in the NPTS:

- Work Trips, including University Trips
- Shopping Trips
- School Trips
- Recreational/Social Trips

Pedestrian Latent Demand Analysis

For each trip type, the location of the generators and attractors was determined. The individual location of the generators and attractors for school and social/recreation trips was identified and mapped. For work and shopping trips, aggregated data at the TAZ level is utilized to calculate the number of generators/attractors located proximate to a road segment. The 1999 Base Year ZDATA developed for the Miami-Dade County 2025 LRTP Update served as the basis for this assessment.

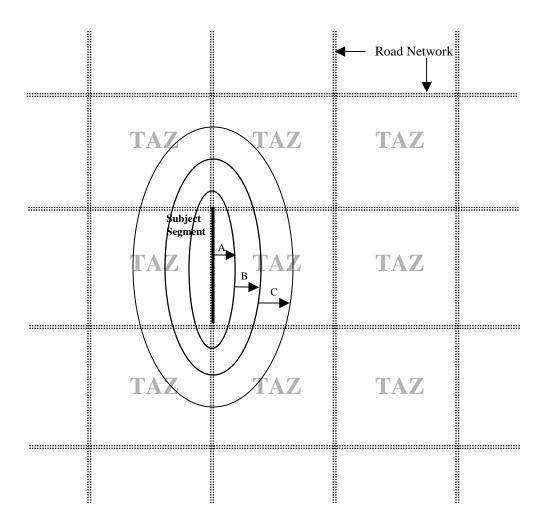
The LDS recognizes that the impact of distance on the direct relationship between the number of trip productions in one area and the number of trip attractions in the destination area is greater for the pedestrian mode than for the auto mode. Latent pedestrian trip activity is directly related to the frequency, magnitude and proximity of trip generators and attractors to a roadway segment. The Non-Linked Trips Latent Demand Score for a roadway segment is the sum of the individual trip purposes for each roadway corridor multiplied by their associated trip share from the National Personal Transportation Survey (Number of Person Trips by Mode of Transportation and Trip Purpose, 1990 NPTS).

Table B3 identifies the spatial query and generators/attractors performed for each of the four trip types analyzed. Spatial queries for each trip type are depicted in **Figures B2** through **B6**. A brief description of each trip type follows.

Table B3. Generators and Attractors by Trip Type

TRIP TYPE	QUERY	GENERATORS & ATTRACTORS
Work Trips	Segment-based	TAZ Population Density Population in Buffer from TAZ Total Population
Work Trips – Colleges and Universities	Attractor-based	FTE – College and University
Shopping Trips	Segment –based	TAZ Total Employment Population in Buffer from TAZ Total Population
School Trips	Attractor-based	Average School Enrollment for School District
Recreational/Social Trips- Parks and Trail Heads	Segment –based	Total Number of Parks/Trail Heads Population in Buffer from TAZ Total Population
Recreational/Social Trips – Urban Trails	Attractor-based	Total Number of Urban Trails Population in Buffer from TAZ Total Population

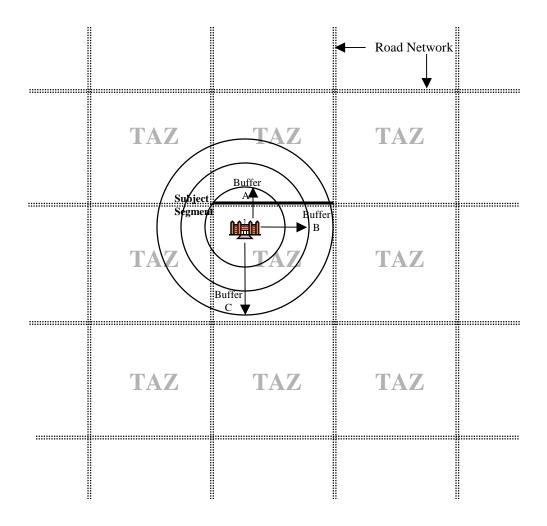
Figure B2.
Work Trip Spatial Queries
(Segment-Based)



Potential work trips are estimated based on the following variables:

- •1999 Total employment within buffer
- •Population within buffer

Figure B3.
Spatial Queries for Colleges and Universities
(Attractor-Based)



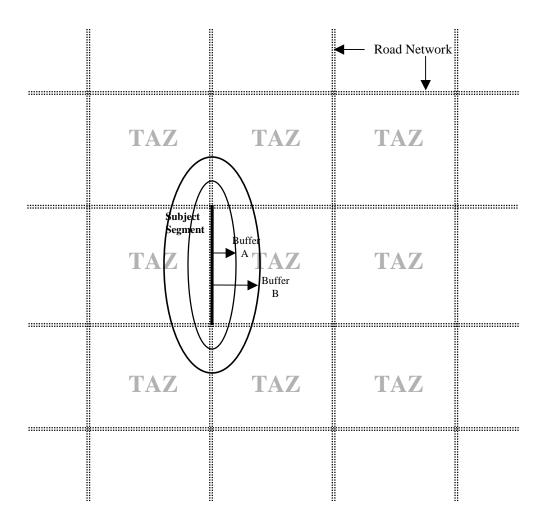
Colleges and Universities are considered work trips rather than school trips due to similar trip characteristics. Potential work trips associated with colleges and universities are based on the following variables:

- •1999 Full-time enrollment of college or university
- •Percent of segment within buffer

Figure B4.

Spatial Queries for Shopping and Errands

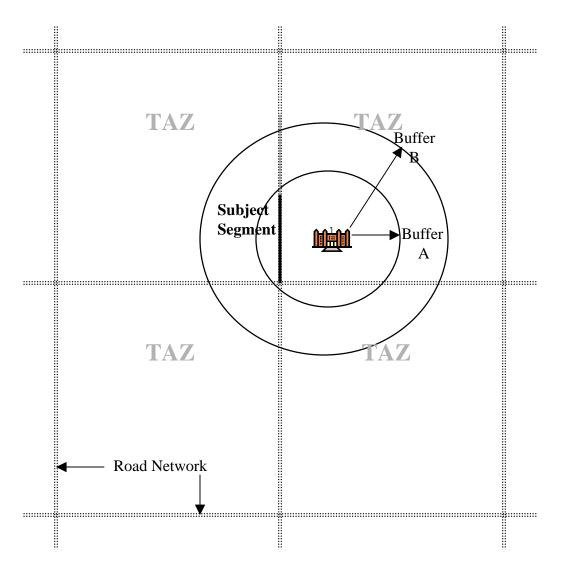
(Segment-Based)



Shopping and errands include two distinct categories, work-based errands and home-based errands. Potential trips are based on the following variables:

- •1999 total employment
- •1999 population within buffer

Figure B5.
Spatial Queries for School Trips
(Attractor-Based)

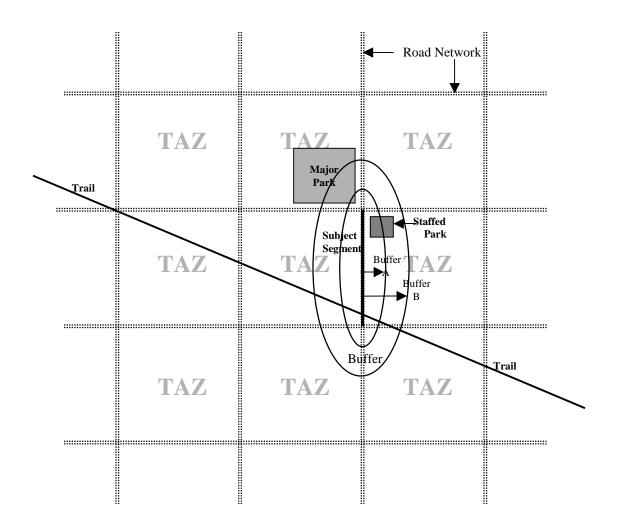


The locations of elementary, middle and senior high schools act as the attractor for potential school trips. Potential school trips are based on the following variables:

- 1999 average school enrollment for Miami-Dade County public schools by type: elementary, middle and senior
- Percent of the road segment that falls within the buffer

Figure B6.

Spatial Queries for Parks and Trail Heads
(Segment-Based)



Public parks and trail heads are the attractors for recreational/social trips. Due to similar trip attraction potential, trail heads are classified as major parks. Potential recreational/social trips are based on the following variables:

- 1999 population within the buffer
- Number of parks, by type, that fall within the buffer

Work Trips

Potential work trips are a function of the sum of all generators and attractors within the defined buffers reduced by the probability of making the trip at each buffer distance (impedance factor). Generators and attractors for a given roadway segment are estimated based on the population density and total employment within the Transportation Analysis Zone (TAZ) adjacent to the roadway segment.

Work trips also include trips to and from colleges and universities. The spatial analysis for university/college trips is activity based with the location of the colleges acting as the attractor. Trip generators are estimated using full-time enrollment (FTE) for a given college and the population within the TAZ.

Shopping and Errand Trips

Total shopping/errand trips are a function of the total number of generators and attractors within the adjacent TAZ for each buffer reduced by the impedance factor associated with each buffer. Like work trips, population is used to estimate the number of generators and employment is used to determine the number of attractors within a defined TAZ.

School Trips

School trips are a function of the sum of twice the average school enrollment multiplied by the percent of the segment within the buffer reduced by the impedance factor associated with each buffer.

Like works trips associated with universities or colleges, the spatial query is attractor-based with the attractor being the location of each school. Average school enrollment was calculated for each school type: elementary, middle and high schools.

Recreational and Social Trips

Public parks and trailheads are used to calculate potential recreational and social trips. Total trips are a function of the sum of all the trip generators/attractors within each buffer zone reduced by the impedance factor associated with each buffer. The location of each park/trailhead acts as the attractor and the total population within a TAZ is used to calculate potential generators.

Trips associated with each park are estimated based on the type of park being analyzed. Parks were classified in one of three categories, each assigned a different trip generation rate: major parks, staffed parks and minor parks. The average park size was calculated for each park type and multiplied by the corresponding trip generation rate. Trailheads were considered major parks and assigned the corresponding trip generation rate.

Review of Transportation Improvement Plan (TIP)

Projects included in the TIP have potential impact on bicycle and pedestrian improvements. The 2001 to 2005 TIP was reviewed for project significance. Construction projects to occur in the year 2001 or 2002 will not provide opportunities to incorporate bicycle or pedestrian improvements. Projects such as Intelligent Transportation Systems (ITS) do not provide opportunities for physical bicycle and pedestrian improvements. Resurfacing projects have the potential to affect only bicycle improvements.





